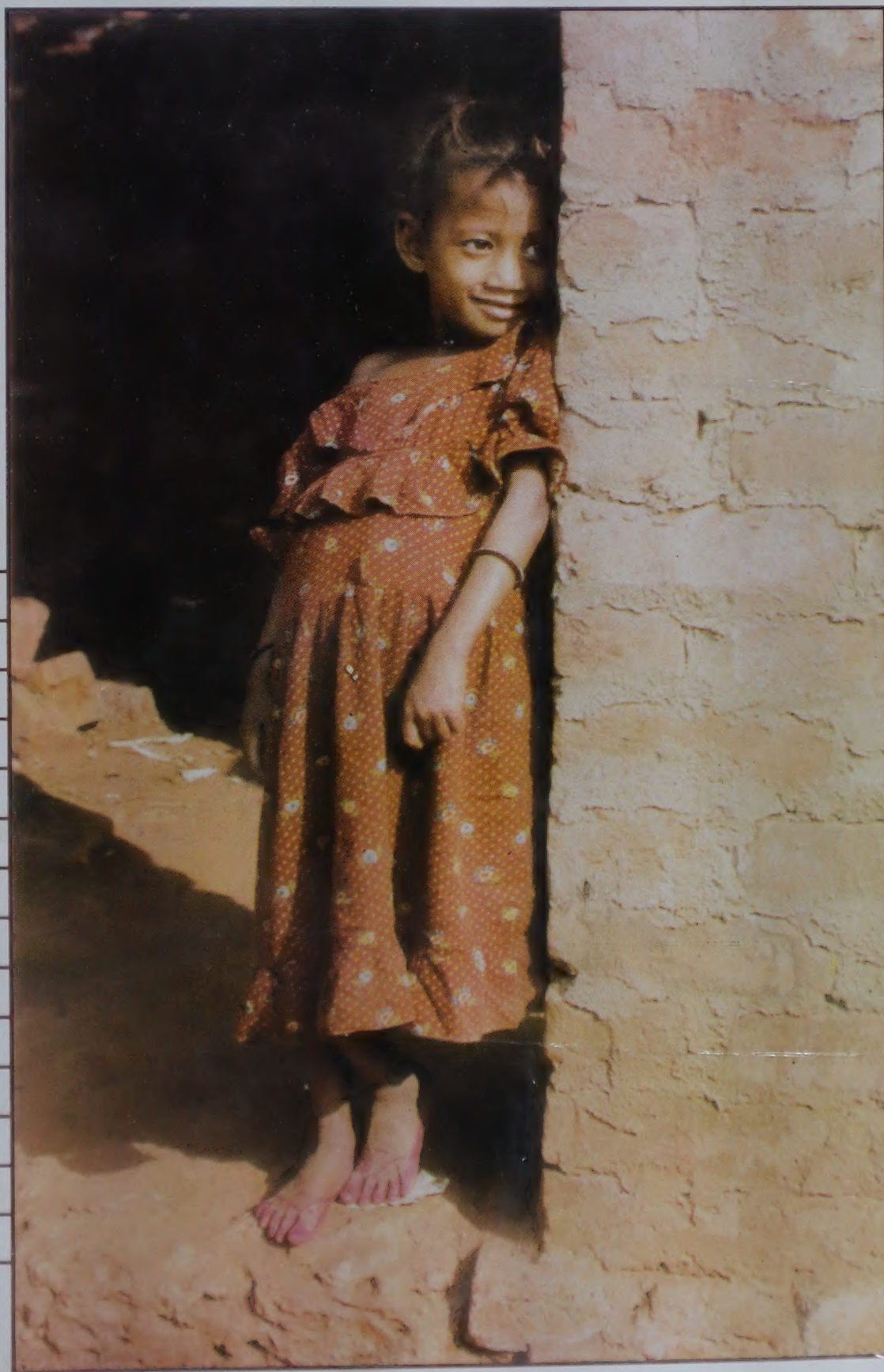


Situation Analysis of Women and Children in Orissa

1991



02282



Dr. K. R. Antony

**Situation Analysis
of Women and Children
in Orissa
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Prepared by
**OPERATIONS RESEARCH GROUP
BHUBANESWAR**
for
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**Situation Analysis
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in Orissa
1991**

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ORISSA



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Dated the 8th June, 1992

FOREWORD

Sustainable development of human resources is universally acknowledged as the most effective means of lasting socio-economic transformation. Women accounting for about half of the population and children forming about 40 per cent of the populace constitute the bulk of the country's human resources. While children as future citizens of tomorrow shape the destiny of nation, women are pivotal pillars of the social system.

It gives me immense pleasure to learn of the initiative by UNICEF, Bhubaneswar, to bring out a cogent and concise Situation Analysis of Women and Children in Orissa. The analysis offers an excellent multi-sectoral information base. Intended as an aid for initiation, strengthening and expansion of multi-sectoral interventions, the analysis would hopefully contribute to improve the quality of life of millions of women and children in the state.

The State of Orissa with a population of 3.15 crores (1991) ranks ninth in the country in terms of area. The State recorded rapid strides in recent past. Orissa's population growth rate during 1981-1991 was 19.5 as against 23.2 at the national level. Besides controlling the most difficult problem, the sex-ratio of Orissa at 972 females per thousand males is better than all India figure of 928. The immunization coverage for infants (0-1 year) in the state during 1991-'92 was 92 per cent. The State's birth rate is lower and enrolment ratio for students in class I-V (6-11 years) is slightly better in comparison with national averages despite the resource constraints and the scourge of recurring natural disasters.

Nevertheless, the State has a long way to go. The literacy rate (1991), drop out rate for class I-V and enrolment ratio for class VI to VIII (11-14 years) are slightly lower than all-India figures. A frontal attack needs to be launched to reduce infant mortality rate which is 123 for 1990, substantially higher than the national average. The female percentage of workers as per 1991 census is low at 20.25 that too mostly as marginal workers. In 1990 the percentage of women employees to total employees in the organised sector (public and private) was very low at 8.7 in the state. Most of social and economic indicators show gender specific differentials usually adverse in case of females. Sharp urban-rural disparities are also evident underlining the need for special efforts in backward rural and tribal areas of the state.

The State government has initiated a package of measures to impact positively on survival and protection of the children and accomplish the cherished goals of 'Health for All' and 'Education for All' by the year 2000 and the International Decade for Sanitation and Drinking Water Supply. Simultaneously, efforts are on to alleviate deep-rooted poverty specially among the scheduled castes and scheduled tribes comprising about 40 per cent of total state's population. In addition to the schemes like ICDS, UIP, Non-formal Education and DWCRA, the State is implementing a number of poverty amelioration and employment generation schemes. The proportion of no source problem villages for drinking water purposes in the state in 1991 was just 2.3 per cent, thanks to the vigorous execution of rural water supply schemes. The

fundamental principle beneath all the programmes is community participation.

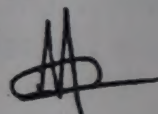
The analysis presented is comprehensive encompassing all sectors and dimensions impinging directly or indirectly upon the living condition of women and children. Accordingly elaborate and intensive light is shed on economic potential, food security, nutrition, mother and child health, education, family welfare, childhood disabilities, poverty alleviation programmes, women's development and destitute and working children.

The Eighth Five Year Plan of the state accords singular importance to the community and social sectors for improved quality of life. The analysis will vastly influence the resource flows in the right direction in improving the status of individuals, families and communities in a holistic and integrated planned manner.

It is highly commendable that the UNICEF office at Bhubaneswar in close cooperation with various departments of the State government undertook the urgent task of analysis in right earnest. The study was painstakingly carried out by the Operations

Research Group, Bhubaneswar. Subsequently, the report was edited and updated tables incorporated for ready reference including demographic and occupational statistics from the 1991 Census (Provisional Population Totals). All those involved in this massive effort deserve compliments.

The situation analysis document will be of immense value to all those concerned with sustainable development in general and the emancipation of women and children in particular in view of the broadspectrum of the issues, problems and alternatives incorporated in it. Policy makers, planners, academicians, administrators and grassroots development functionaries would find the analysis an invaluable aid as well as a referral tool for programme planning, implementation and review. I would also hope that the document inspires dialogue and debate on the subject at different levels.



R. K. Rath

Chief Secretary to Government of Orissa

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CHAPTER I

The State of Orissa

A profile

Introduction

1.1 The situation of women and children in a given environment is related in a complex way to the many factors of geography, rural-urban differences, the politico-administrative set-up, language, culture, socio-economic conditions etc. In order to understand the situation in its proper perspective a brief description of the state of Orissa is presented.

1.2 Orissa is one of the 25 states of the Indian Union. Formerly a part of Bengal Presidency, Orissa attained statehood in 1936. However, the constituent ex-princely states were merged after 1948 to form 13 districts that now constitute the whole state. Orissa lies on the east coast of India within 17.5 to 22.5 North latitudes and between 81.5 and 88 East longitudes. It shares boundaries with four states i.e. Madhya Pradesh on the west, Bihar on the north, West Bengal on the north east and Andhra Pradesh on the south-eastern side. The Bay of Bengal lies on its eastern periphery.

Physiography

1.3 The whole state comes within the tropical zone and is divided into four agro-climatic regions; the Northern plateau, the Central Table land, the Eastern Ghats, and the Coastal plain. The four regions have distinct relief and silvicultural features. Gene-

rally, the areas of northern plateau are undulating uplands interspersed with hill range reaching an elevation of 300-600 meters. This zone comprises of the districts of Mayurbhanj, Keonjhar and Sundergarh. The Central table land areas have range of elevation from 150 meters to 300 meters. The districts of Bolangir, Sambalpur and Dhenkanal constitute this zone. The Eastern ghats region comprises of the South-western districts of Koraput, Phulbani and Kalahandi and is characterized by dense forests and high hill ranges measuring 600-900 meters above the sea level. The coastal plain area is the most fertile. The districts of Cuttack, Puri, Ganjam and Balasore come within this zone.

1.4 The state is drained by three major rivers – the Mahanadi, the Brahmani, and the Baitarani. It receives an annual average rainfall of 1500 m.m. with variations among the agro-climatic zones. Eighty per cent of the rainfall is received in the monsoon months during June-September.

Land area

1.5 The total geographical area of the state is 155707 sq.km. which accounts for 4.8% of the area of the country. It ranks 9th among the states of India in terms of area. Among districts of the state, Koraput is the largest one with an area of over 17% of the total

area followed by Sambalpur (11%). On the other hand Balasore is the smallest district with an area of about 4%. The distribution of area among the districts is so skewed that 10 of the 13 districts have an area less than the average (11977 sq. km.). In terms of the agro-climatic zones, the coastal plains and the central table land each comprises of a quarter of the land area, the eastern ghat region accounts for over 32% while the northern plateau being just 18% (Table 1.1).

Administrative set-up

1.6 Orissa is divided into 13 districts. Each district is further divided into sub-divisions and blocks. The total number of sub-divisions of Orissa is 58. There are 314 community development blocks covering 50,887 villages including uninhabited ones. Thus, approximately a district has 4 sub-divisions and 24 blocks on an average with about 3900 villages. The districts of Cuttack, Bolangir, Dhenkanal, Koraput, and Sambalpur have more number of sub-divisions than the state average while six of the districts have larger number of blocks than the state average. Koraput district has the maximum

number of blocks followed by Cuttack. However in terms of villages, Cuttack district records the highest position with Koraput close behind. There are 108 towns and cities in Orissa according to the 1981 census. Ganjam has the maximum number of towns (20) followed by Koraput (14) (Table 1.2).

Language and Religion

1.7 The main language spoken by the people of Orissa is Oriya. In addition, Telugu, Bengali, Urdu and Hindi are spoken by a few lakhs of people. The relatively large number of Telugu and Bengali speaking people is on account of the proximity to the neighbouring states of Andhra Pradesh and West Bengal. Of the eleven languages spoken by a large number of people in Orissa, six are tribal languages accounting for 6.4% of total population. As is true to the country, Orissa has a majority of its population as Hindus – in fact higher than the all India figure. Christians, Muslims, Sikhs and Buddhists follow in that order. It may be interesting here to note that the population of Hindus in Dhenkanal district of Orissa is highest not only in the state but also in the country in terms of percentage.

TABLE 1.1
Physiography of Orissa

Sl. No.	Zones	Districts covered	Geographical area (Sq. Kms.)	%
1.	Northern Plateau	Mayurbhanj Keonjhar Sundergarh	28433	18.3
2.	Eastern Ghats	Koraput Phulbani Kalahandi	49852	32.0
3.	Central Table Land	Bolangir Sambalpur Dhenkanal	37256	23.9
4.	Coastal Plain	Cuttack Puri Balasore Ganjam	40166	25.8
Total			155707	100.0

Source : Census of India, 1981

ADMINISTRATIVE MAP OF ORISSA



TABLE 1.2

Administrative set-up in Orissa

Sl. No.	Name of District	% of the state area	No. of sub-divisions	No. of blocks	No. of villages		No. of towns
					*I	*UI	
1.	Balasore	4.05	3	19	3832	508	6
2.	Bolangir	5.72	4	20	2537	204	7
3.	Cuttack	7.16	6	41	6025	570	9
4.	Dhenkanal	6.95	7	16	2685	529	9
5.	Ganjam	8.05	4	29	4178	477	20
6.	Kalahandi	7.56	3	18	2695	145	5
7.	Keonjhar	5.33	3	16	2047	66	6
8.	Koraput	17.32	6	42	5667	680	14
9.	Mayurbhanj	6.69	4	26	3729	260	4
10.	Phulbani	7.14	3	15	3410	239	3
11.	Puri	6.54	4	29	4352	474	9
12.	Sambalpur	11.25	6	29	3436	249	10
13.	Sundergarh	6.24	3	17	1665	55	6
Total		100.00	56	314	46137	4597	108

Source : Census of India, 1981 *I = Inhabited *UI = Uninhabited

Ethnic diversities

1.8 A special feature of Orissa is the preponderance of ethnic communities living in concentrated pockets isolated from the mainstream. These communities are commonly referred to as scheduled tribes and constitute about a quarter of the state's population living in over one-third of the state. The districts of Koraput, Sundergarh, Mayurbhanj and Phulbani and most parts of Keonjhar district can be classified as tribal districts.

1.9 There are 93 Scheduled Castes and 62 Scheduled Tribes in the state. The latter are more socially and economically backward than the scheduled castes. Moreover, they are unevenly dispersed in the state and are slow in assimilating an 'alien' culture. Of the 62 important tribes in Orissa, 12 are considered major. These are Kondh, Gondh, Santhals, Saura, Kolha, Munda, Paraja, Bhuyans, Kisan, Oraon, Koya and Gadaba.

They constitute about 74% of the total tribal population of the state.

1.10 The tribes are unevenly distributed over the four zones. In the Northern Plateau, there are as many as 58 tribal groups. In this zone, there are 9 major tribes and five primitive tribes. The Central Table land comprises of 2 major tribes and 45 tribal groups. On the basis of tribal dominance, the areas of Eastern ghat zone can be divided into five sections :

- 1) Northern section comprising chiefly of Khonds and Saura.
- 2) Central section often referred to as Khond Zone also has 29 other tribal groups.
- 3) Rayagada section has 42 tribal groups with predominance of Khonds and Saura.
- 4) South Eastern section having over 75 tribal communities is the home of the Bondas whom anthropologists consider very primitive.

5) South-Western section is dominated by Khonds and Gondhs.

The coastal region has around 51 tribal communities, chief among which are the Sauras, the Santals, the Bhuyans, the Olhas and the Mundas. The tribals of this belt are in close contact with their non-tribal neighbours and are in various stages of acculturation.

1.11 The scheduled castes (S.C.) on the other hand, are found all over the state. Seven Scheduled Castes are predominant with population over 1 lakh each. They are Bauri, Dhoba, Dom, Gandha, Hadi, Khandara and Pano. Besides, there are Bho, Chamar, Ghasi, Gokha, Mahar and Mochi. The Gandhas and Ghasi are mostly seen in western Orissa, i.e. Sambalpur, Sundergarh and Bolangir.

Communication system

1.12 Communication plays a very important role in the development of the region. In a state like Orissa which is characterised by a large tribal population and heavy rural concentration, the dissemination of information through appropriate network of communication assumes an important role for educating the masses. In recent years, there has been widespread growth of television (TV) network through Low Power Transmitters (LPT) as well as extension of All India

Radio (AIR) actively coupled with growth in print media. This has facilitated the spread of information and publicity to far-flung areas. There are 12 LPTs commissioned up to September 1989 covering 8 of the 13 districts of the state. Further, Cuttack and Sambalpur have a high power transmitter each. The total TV coverage estimated for Orissa was 43.1% of area and 58.5% of population.

1.13 State Government organizes the information/publicity campaigns through print media, press information, audio-visual publicity and field programmes. Documentaries on different themes (mainly social with a few focussed on children) reproduced by the Film Production Unit. An average of 12 documentaries are produced every year. Every district headquarters has an information centre to provide reading room facilities, television and radio for community viewing. Community viewing centres numbering 660 in the districts of Sambalpur, Dhenkanal and Bolangir have tel-clubs to provide feed-back on TV programmes. Thus there has been substantial progress in the field of information dissemination. In order to make it supportive of development, communication must become participatory and reoriented to the needs of the society so as to be a powerful vehicle for development of the people.

CHAPTER II

Demographic Profile of Orissa

Introduction

2.1 One out of every twenty five persons in India is a resident of Orissa which ranks 11th among the states covering 4.8% of total area. Its population was growing at the rate of 2% annually.

2.2 The focus being the child population (0-14 years) in the state, the demographic profile of the state is presented to help understand the factors which operate in determining the current size of the child population, its composition and prospects for the future.

Size, Area and Density

2.3 The total population of the state in 1981 stood at 26.37 million, district-wise variation in population size was large. Cuttack district with a population of 4.63 million claims 17.55 per cent of the total followed by Puri (11.08%) and Ganjam (10.13%). With a population of 0.72 million, Phulbani is the least populous district.

2.4 The overall density of the state in 1981 was 169 persons per sq. km. (Table 2.1). The lowest density of 64 persons per square kilometer was observed in Phulbani whereas

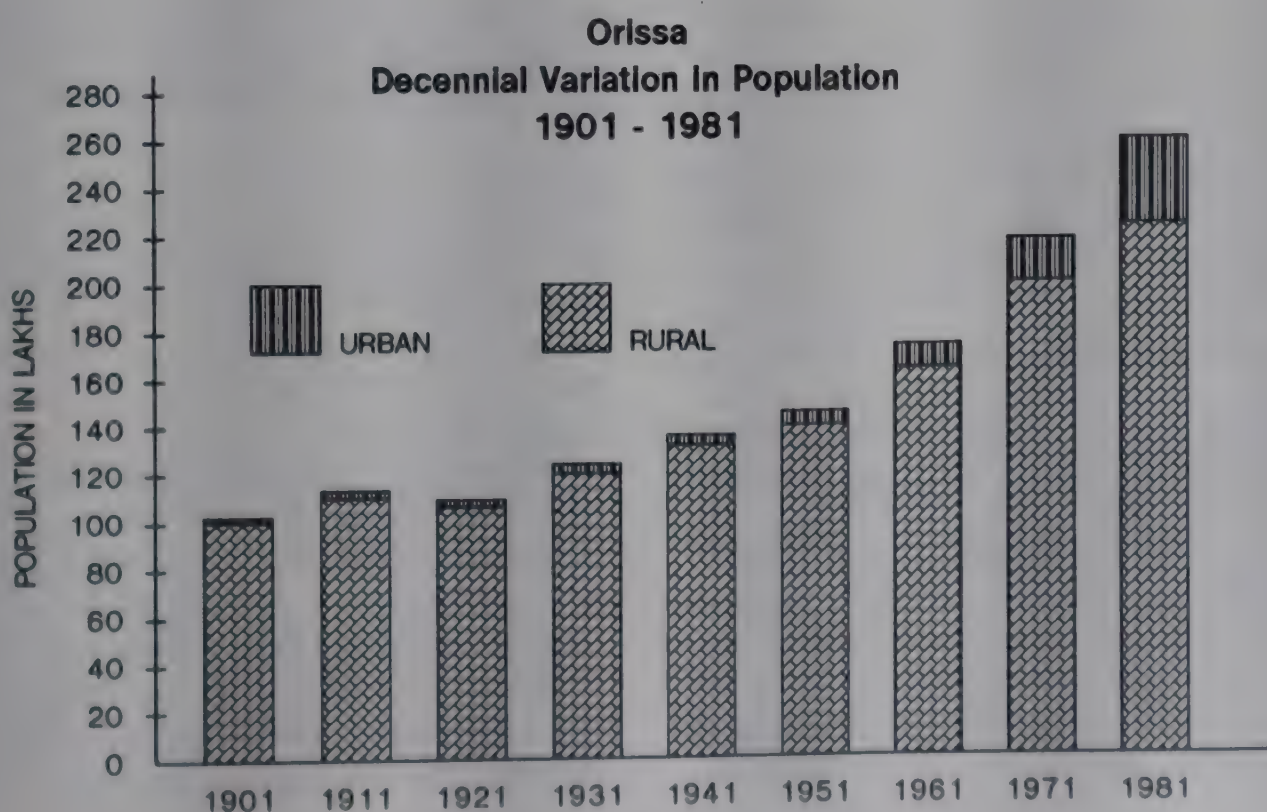


TABLE 2.1

Population and Density By Districts (Orissa), 1981

Sl. No.	District	Area Sq. Km.	Population Number (000)	%	Decade Growth rate 71-81	Density per Sq. Km.
1.	Balasore	6311	2,253	8.54	23.70	357
2.	Bolangir	8913	4,459	5.53	15.47	164
3.	Cuttack	11142	4,629	17.55	20.93	415
4.	Dhenkanal	10827	1,583	6.00	22.33	146
5.	Ganjam	12531	2,670	10.13	16.40	213
6.	Kalahandi	11772	1,339	5.08	15.06	114
7.	Keonjhar	8303	1,115	4.23	16.65	134
8.	Koraput	26961	2,484	9.42	21.57	92
9.	Mayurbhanj	10418	1,582	6.00	10.30	152
10.	Phulbani	11119	717	2.72	15.38	65
11.	Puri	10182	2,921	11.08	24.79	287
12.	Sambalpur	17516	2,281	8.65	23.64	130
13.	Sundergarh	9712	1,338	5.07	29.79	138
Orissa		1555,707	26,370	100.00	20.17	169

Source : Census of India, 1981

the density was highest (415) in Cuttack district. Factors like soil fertility and urbanization are important contributors. In general, the coastal districts with fertile agriculture land are more dense. The inhospitable land in the western part inhabited by a large number of tribals is thinly populated.

The implication of density of population in provision of service facilities is more direct. Considering an average service area of 5000 population, it implies that as much as 30 sq. kms. would have to be covered.

Settlement pattern

2.5 Orissa lives in its villages. As much as 88% of the population in 1981 was classified as rural. The total number of inhabited villages exceeds 46.5 thousand. This number is exceeded only by Bihar, Madhya Pradesh and Uttar Pradesh. The extreme rural character of the population is brought out by the fact that the average size of a village is around 500 persons. Small villages with

population not exceeding 500 persons account for 66.4% of the total. Those with population 500-999 was 21.1% and 1000-1999 was 9.8%. Thus villages with population exceeding 2000 constitute hardly 2.7 per cent. Low density coupled with small villages widely scattered poses problems in providing services close to the habitations.

Urban population

2.6 The urban population of the state as enumerated in 1981 census was 31.64 lakhs constituting 11.8 per cent of the total population. During 1971-81, the urban population registered a growth of 68.5% as against 15.3% in rural and 20% in the total population. The number of urban areas increased from 81 to 108 during the period comprising of 27 municipalities, 68 notified area councils and 13 census towns. Wide variation is observed with regard to the proportion of urban population in the districts. Sundergarh records the highest percentage (30.6%)

Percentage of Urban Population in Orissa, 1981



followed by Sambalpur (15.5%), Puri (14.8%) and Ganjam (14.25%). Phulbani has the lowest percentage of urban population (5.26%). By size, 14 urban areas with 50,000 or more population in each cover 54 per cent of the total urban population. The remaining 46 per cent reside in smaller towns. Several among these exhibit characteristics of overgrown villages.

2.7 Urbanization has been rather slow in the state. Excepting Bihar, the neighbouring states namely Madhya Pradesh, West Bengal and Andhra Pradesh have higher percentages of urban population. Compared with all India figure the proportion of urban population is just half.

Size of household

2.8 The average size of household in the state was 5.3 without any marked differences between rural and urban areas. Districtwise variation indicates that the household size is highest in Cuttack and lowest in Phulbani. Household size is not dependent on demographic factors alone but is linked to culture and economy in the area. For example

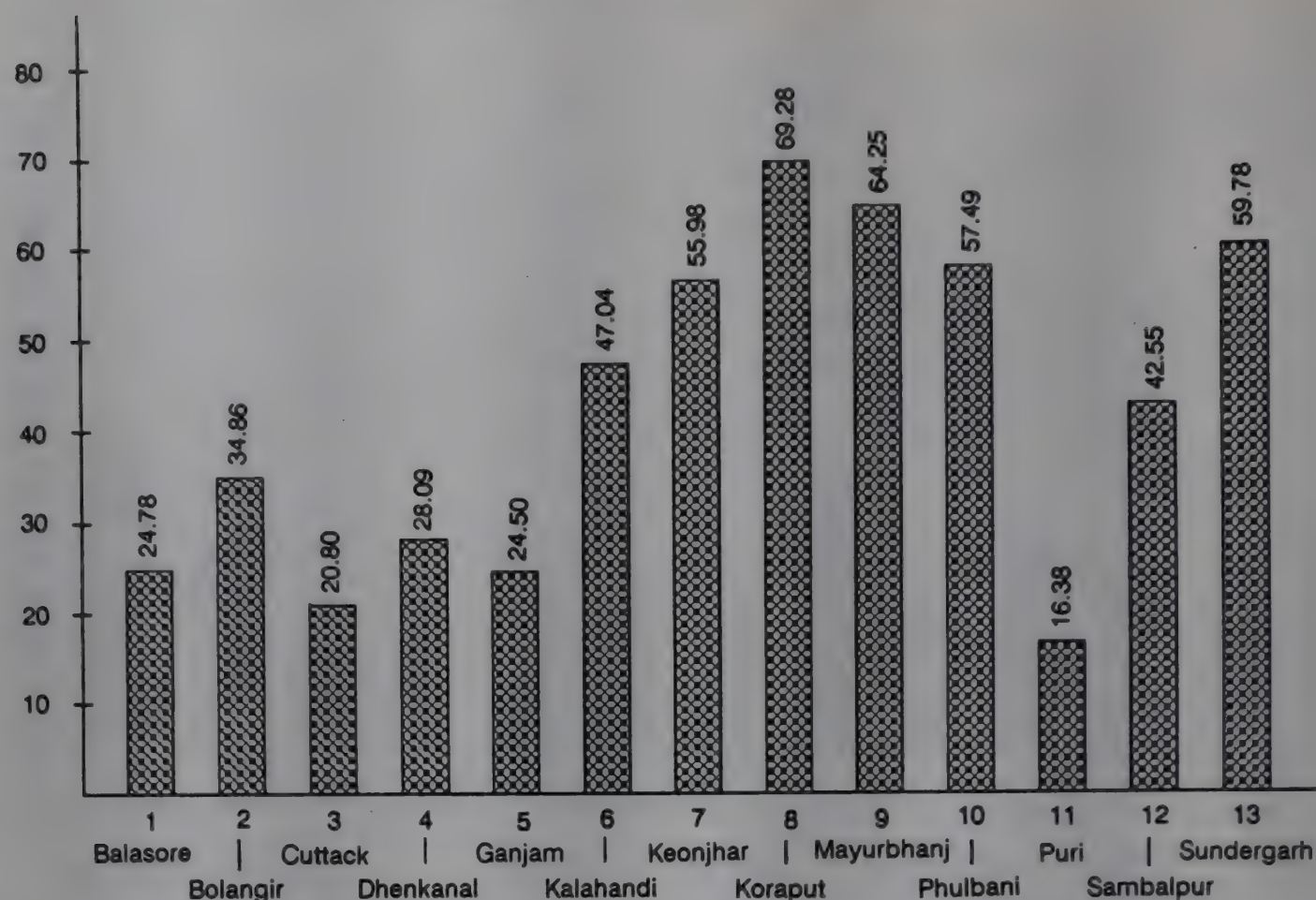
scheduled tribe households are mostly nuclear. In contrast, dependence on settled agricultural operations is a factor which promotes joint living in a single household.

SC & ST population

2.9 The population of the state as indicated before has distinct ethnic character with as much as 22.43% belonging to scheduled tribes. The scheduled castes comprise 14.66% and other castes 62.91% of the total. The proportion of SC population is evenly distributed in all the districts except in Mayurbhanj and Sundergarh where the proportion of population is low. The tribal population, on the other hand, varies from a high of 57.7% in Mayurbhanj to a low of 3.13% in Cuttack district. The scheduled groups taken together are more heavily represented in the western parts of the state.

2.10 These scheduled categories differ from the general population not only in terms of culture but many other socio-economic characteristics. These are reflected in the demographic variables like fertility and mortality.

Percentage of SC & ST Population, 1981



Population growth

2.11 Population growth in the state during the past eight decades depicts a pattern in which two distinct periods are clearly identifiable. From the beginning of the century the population increased by about one per cent per year till 1951. Fertility was high during this period. In the absence of modern health measures, mortality continued to be high which checked the growth of population. In fact, the growth rate was negative in the twenties due to wide-spread epidemics.

2.12 The year 1951 marked the beginning of a transition phase. Improvements in mortality took place and the population experienced an increased growth of nearly 2% in the fifties, 2.5% during the sixties and thereafter dropping down to 2% during the sixties and further dropping down to 2% in the seventies (Table 2.2). Perhaps this signals the start of fertility decline which is supported by evidence of achievement in family welfare sector and changes in nuptial indicators. Between 1971-81, the population growth rate was low (10.3%) in Mayurbhanj and high (29.79%) in case of Sundergarh.

2.13 Decadal growth of population hovered around one million till 1951. During 1951-61

TABLE 2.2
Population of Orissa 1901-1981

Year	Population (in '000)	Decadal growth	
		Absolute change (in '000)	%
1901	10,303		
1911	11,379	+ 1,706	+ 10.44
1921	11,159	- 220	- 1.94
1931	12,491	+ 1,332	+ 11.94
1941	13,768	+ 1,277	+ 10.22
1951	14,646	+ 878	+ 6.38
1961	17,459	+ 2,903	+ 19.82
1971	21,945	+ 4,396	+ 25.05
1981	26,370	+ 4,426	+ 20.17

Source : Census of India, 1981

decade, the population of the state increased by 2.9 million and in the following decade further increased by 4.4 million. Despite decline in the growth rate and consequential change in the proportion of children, the absolute change in the total population during 1971-81 remained almost the same as in the previous decade. This is because of a larger number entering the reproductive age groups.

Fertility changes

2.14 The birth rate does not show a clear perceptible downward change year after year. Nevertheless, a declining trend is indicated. The Sample Registration data for the last 15 years show that the birth rate fluctuated between 30-35 per thousand population. During this period rural rates were invariably higher by about 2-4 points. One of the major factors of low urban birth rates could be greater enlightenment and better female education (Table 2.3).

2.15 Marriage at younger ages has been a crucial contributing factor to higher fertility. This is complemented by near universality of marriage of the population. These factors lead to a pattern of fertility which is favourable to high reproduction. Changes in this regard have been very slow in spite of legal

sanctions prohibiting early marriage. Due to stronghold of old customs and without commensurate changes in socio-economic climate, the child Marriage Restraint Act prohibiting child marriage failed to make much impact.

2.16 However recent changes appear to point towards a promising future. At the national level the average age at marriage of girls increased slowly from 13 years in 1901 to about 17 years in 1971. During the 1971-81 decade, the rise in age at marriage was comparatively high. The singulate mean age at marriage increased from 22.36 years to 23.27 years for males and 17.16 years to 18.32 years for females. The corresponding figures for Orissa are 22.57 increasing to 24.17 for males and 17.29 to 19.04 years for females. The progress of the state in this sphere of social development is better in comparison with neighbouring Bihar, Andhra Pradesh and Madhya Pradesh. West Bengal, however, shows a better performance.

Correspondingly the number of married couples per 1000 population has declined from 175 to 164 in the decade. Again this is the lowest rate in comparison with neighbouring states excepting West Bengal.

2.17 In 1971 nearly 4 per cent of the girls under 15 years in the state were enumerated

TABLE 2.3
Age specific Fertility Rates, Orissa

Age	Age specific fertility rate					
	1982			1983		
	Rural	Urban	Total	Rural	Urban	Total
15-19	91.7	69.6	89.9	92.6	67.2	90.3
20-24	259.4	150.1	258.6	263.5	272.3	264.4
25-29	232.8	128.1	232.2	252.7	200.9	246.6
30-34	154.3	128.9	151.8	157.3	120.3	153.8
35-39	87.0	60.5	84.4	90.0	55.3	86.7
40-44	33.1	22.7	32.4	39.2	23.8	38.0
45-49	14.1	9.5	13.8	16.7	9.3	16.2

Source : Year Book 1986,
Ministry of Health and Family Welfare, GOI

Proportion married in age groups (1981)



as married. Between 15-19 years 56.7% were married. The percentage of married rose sharply to 92.3% between 20-24 years to reach the highest 95.8 per cent between 25-29 years. The number who remained unmarried is less than one per cent at the age of fifty. This way almost all persons are effective contributors to population growth. The

incidence of widowhood at the age of 50 is 4.5% and is likely to decline further with improvements in mortality.

Changes in the 1971-81 decade have been significant as evident from lower proportion of married persons particularly in the 15-19 age group (30.9%). As against the propor-

Marriage Proportion 1971 and 1981

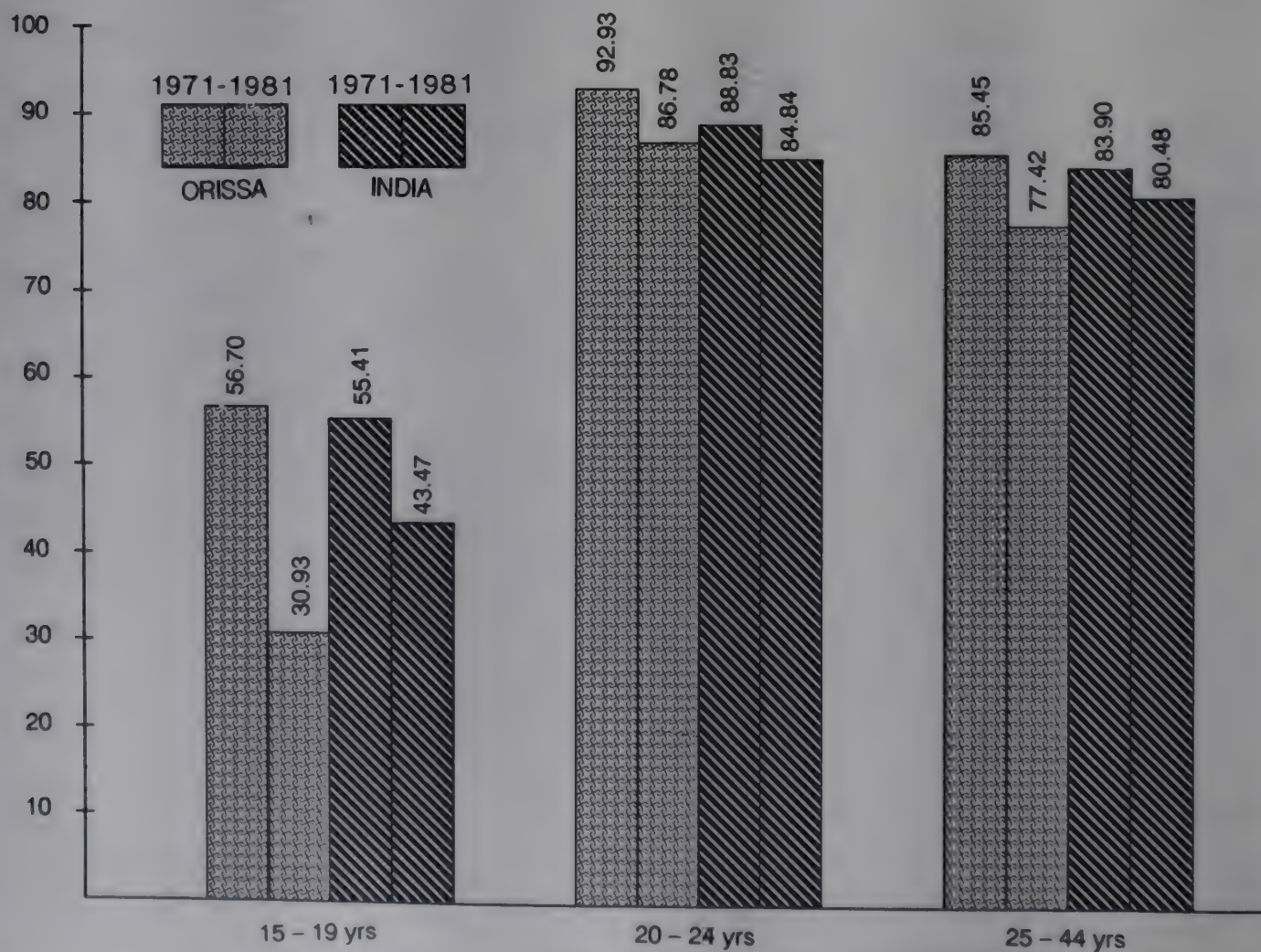


TABLE 2.4
Selected Nuptiality Indicators, Orissa And India

Indicator	Orissa		India	
	1971	1981	1971	1981
Proportion married in age groups				
15-19 yrs	56.70	30.93	55.41	43.47
20-24	92.93	86.78	88.83	84.84
25-44	85.44	77.42	83.90	80.48
Singulate mean age at Marriage				
Male	22.57	24.17	22.36	23.27
Female	17.29	19.04	14.16	18.32
Married couples per 1000				
Population	175	164	170	169

Source : Year Book 1986, Ministry of Health and Family Welfare.

tions in 1971, the per cent married in the 20-24 age group and the 15-44 group are lower in 1981. At the national level, similar decline has been observed but the decline is much higher in Orissa.

2.18 Incidence of sterility as measured by the percentage of married women aged 50 years and above without any live births was 6.10 per cent in 1981 for India. That of Orissa

is highest in this regard (10.70%) as reported in the Key Population Statistics based on 5% sample data (1983).

2.19 The pattern of fertility is such that child bearing starts at an early age. The age specific fertility rate is highest between 20-24 years. In fact a plateau of high fertility is recorded between 20-29 years, falling sharply thereafter (Table 2.5). The total fertility rate

TABLE 2.5
Fertility Indicators, Orissa 1981-84

Indicator	Year	Rural	Urban	Total
1. General fertility rate	1981	132.4	116.4	131.2
	1982	134.8	131.8	134.5
	1983	141.9	128.1	140.6
	1984	136.8	124.4	135.7
2. Total fertility rate	1981	4.3	3.7	4.3
	1982	4.4	3.8	4.3
	1983	4.6	3.7	4.5
	1984	4.4	3.6	4.4
	1986	4.0	3.1	3.9
3. Gross reproduction rate	1981	2.1	1.8	2.1
	1982	2.1	1.9	2.1
	1983	2.2	1.8	2.2
	1984	2.1	1.6	2.0

Source : Sample Registration Scheme, Registrar General of India

stood at 3.9 in 1986, slightly higher in rural areas (4.1) while that in urban areas was 3.1.

2.20 A lowering of fertility in the 15-19 age group without a corresponding decline in the age groups 20-24 and 25-29 indicates a possible shift in the pattern. Rise in age at marriage is a likely factor. The evidence is, however, inconclusive.

2.21 The general fertility rate (135.7) also differs between rural (136.8) and urban (124.4) areas. Gross reproduction rate for the total population is fairly high estimated at 2.0 with corresponding rural and urban rates of 2.1 and 1.6 respectively (Table 2.6). The completed fertility of women in Orissa is estimated at 4.3 children which is marginally high in urban areas (4.5). However this is well below the all India average of 4.74 children.

TABLE 2.6
Death Rates in Orissa, 1970-87
(3 yr. Moving average)

Period	Deaths per 1000 population		
	Rural	Urban	Total
1970-72	17.8	11.2	17.3
1971-73	18.6	11.0	17.9
1972-74	18.6	10.9	18.0
1973-75	17.7	11.0	17.2
1974-76	15.4	10.8	15.1
1975-77	15.7	10.7	15.3
1976-78	16.6	9.8	15.5
1977-79	15.7	9.9	15.2
1978-80	14.0	9.3	14.4
1979-81	14.5	8.6	14.0
1980-82	14.0	7.9	13.5
1981-83	13.3	8.3	12.9
1982-84	13.7	9.1	13.8
*1983-85	14.0	9.1	13.6
*1984-86	14.3	8.8	13.8
1985-87	13.9	7.9	13.3

* Provisional

Source : Year Book 1985-86,
Ministry of Health & Family Welfare

2.22 Changes have been noticed from estimates of different fertility indicators. Between 1972-78, the general fertility rate, total fertility rate, general marital fertility rate and total marital fertility rates have declined in rural as well as in urban areas. The decline in urban areas in each case has been comparatively higher. The ratio of children 0-14 years to women aged 15-49 years as well as the ratio of children 5-9 years to women aged 20-24 years had declined between 1971-81. These are lower than the corresponding all India ratios.

Family planning

2.23 Family Planning is of immense help in reducing the family size thereby widening the birth intervals, ultimately leading to better child and mother care. In the districts covered by Area Development Programme in the state, a high proportion of cases sterilized (both women and men) was observed as compared to the spacing methods. This was particularly frequent in the age group 30-44. The use of spacing methods like IUD/Oral pills/Condoms etc. was negligible at 7% for the whole area. In all these, the urban areas showed higher contraceptive protection rate than the rural areas. Similarly the protected couples were higher among the upper caste women than among the SC/ST women. The spread of education and exposure to media are vital factors in influencing the choice of contraceptives.

2.24 Among sterilizations in the project area, the tubectomies were higher (67%) than the vasectomies (33%). Thus more women underwent the operation than men. The major reasons cited by the women were that they did it out of self-interest (34%), 22% had done it as they thought their husbands were too weak to be vasectomized. Yet another 18% underwent the operation on account of their husbands' desire. An important opinion expressed by a majority of women was that as their husbands were the only earning members of the families they could not afford to allow them to be operated since the whole family would suffer in case of any complication. Thus out of fear for their husbands' health (rather than their

own) and also out of economic compulsions most women in urban and rural areas accept to be tubectomized, regardless of any consequence on their own health.

2.25 As per reports of the Ministry of Family Welfare, 34.7% of eligible couples were protected by 1986. Of this 30.2% is accounted for by terminal methods like sterilization and the remaining 4.5% by spacing methods. Since terminal methods are usually taken up at the later age in married life, after two or more children, delaying pregnancies at younger ages is not yet popular.

2.26 To achieve fertility decline not in the limited demographic perspective but in the context of improved maternal and child survival and health, several concomitant socio-economic and health measures are required. The inverse relationship between fertility on the one hand and female literacy and higher age at marriage on the other has been overwhelmingly demonstrated. Increased use of contraception by eligible couples, supply of contraceptives from non-governmental sources and more emphasis on birth spacing methods would be effective and badly

needed measures. Concomitantly, measures are also needed to reduce infant and child mortality levels in order to motivate couples to accept permanent contraceptive methods.

Mortality

2.27 The decline in death rate has been fairly steady. From the level of 18 deaths per thousand population in early seventies, it has reached a level of less than 13 per thousand in the year 1987. Both in case of rural and urban areas, the death rate declined even though the urban rate exhibits a slightly faster rate of decline. However, rural rates have been consistently higher during the period by as much as five points (Table 2.7).

2.28 The mortality level stands high in comparison to those obtaining at the national level and among the neighbouring states with the exception of Bihar. Control of epidemics and communicable diseases has been the major factor contributing to the decline in mortality. Evidently, the state has to go a long way in attaining the standards necessary for further decline.

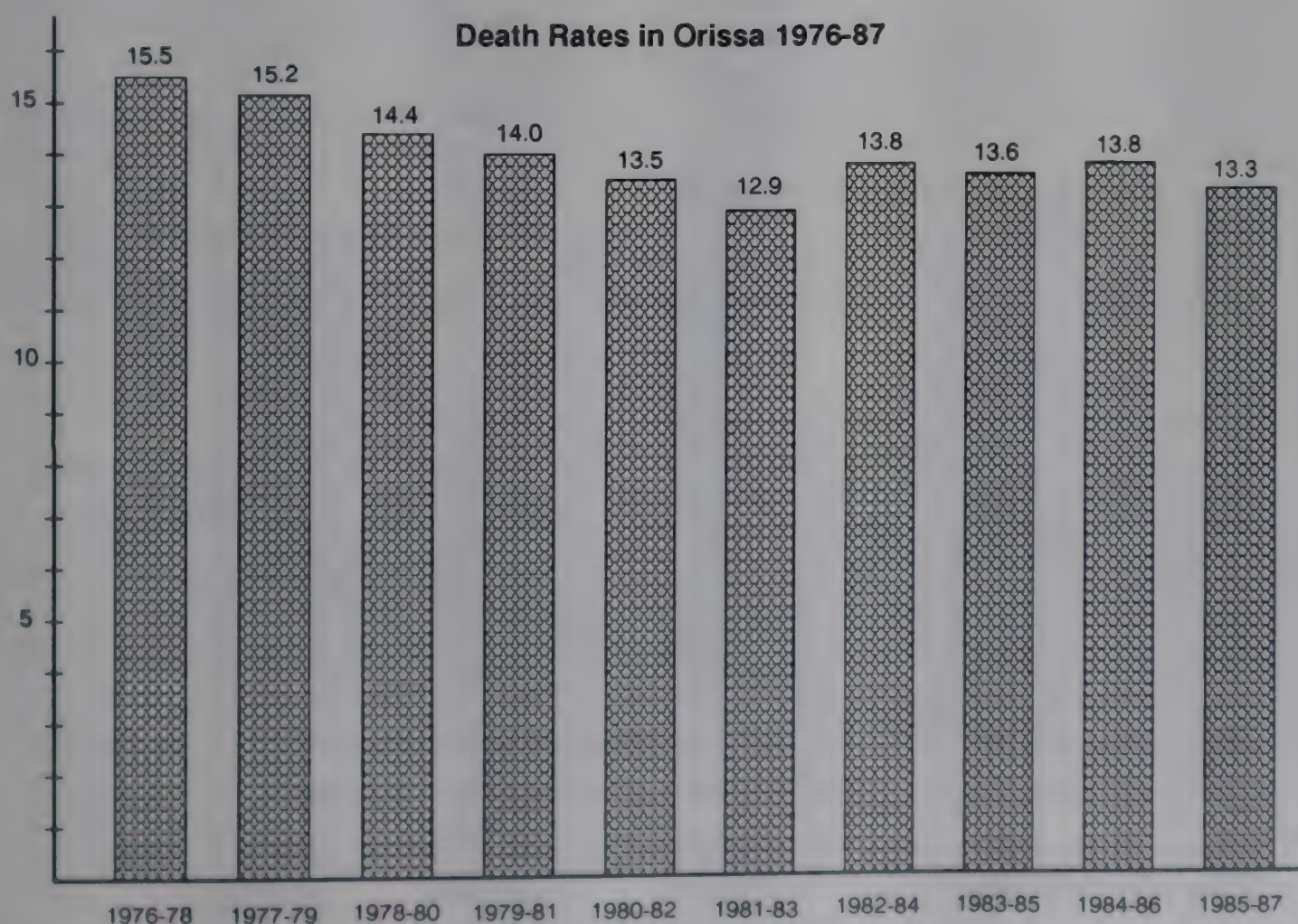


TABLE 2.7

Infant Mortality Rate, Orissa 1976-87

Year	Rural	Urban	Total
1976	130	81	127
1977	151	85	147
1978	121	80	133
1979	154	86	149
1980	150	62	143
1981	140	68	135
1982	139	64	132
1983	131	73	126
1984	135	84	131
1985	135	77	130
1986	130	72	126
1987	130	74	126

Source : Sample Registration Scheme, Registrar General of India

Infant mortality

2.29 Nearly 30 per cent of all deaths occur in the first year of life. Orissa is one of the few states where infant mortality is high (126 per thousand live births in 1986). The rate was 140 or more in the seventies declining to an average of 130 between 1981-86. The rural IMR between 1976-85 was 130 or more, exceeding 150 in some years. In urban areas, the rate was above 80 between the four year period 1975-79 dropping to above 60 in the following three years and rising

again. However urban rates during the years maintained a level lower to that in rural areas by 50 or more (Table 2.8). Infant mortality in the state, despite the decline over years is a matter of grave concern. It requires time-bound interactions to enhance child survival and impact positively on child protection as the State's IMR is much above the all India average.

Perinatal, Neonatal and Post-natal deaths

2.30 From birth to reaching one year of life, the risk to life of an infant depends on a wide variety of factors. Maternal and health care factors are more important during the first week as are health, family status and environment in later months of the child. Inadequacy of care during pregnancy and at child birth is seen from statistics on perinatal mortality (deaths occurring in the first seven days) which is not only consistently high but depicts an increasing trend. The rate has increased from 66 in 1982 to 79 in 1986. Urban rates are significantly lower at almost half the rate in rural areas. Still birth rate (foetal death rate) also increased from 11.72 in 1982 to 18.28 in 1985 lowering down to 17.74 in 1986 (Table 2.9).

2.31 Neonatal mortality for the state was 84 in 1986. This continues to be high and increasing compared with the rate in 1981. In respect of five Area Development Project districts also, the rate was high (61.9) in 1982, with a lower rate in urban areas (54.4)

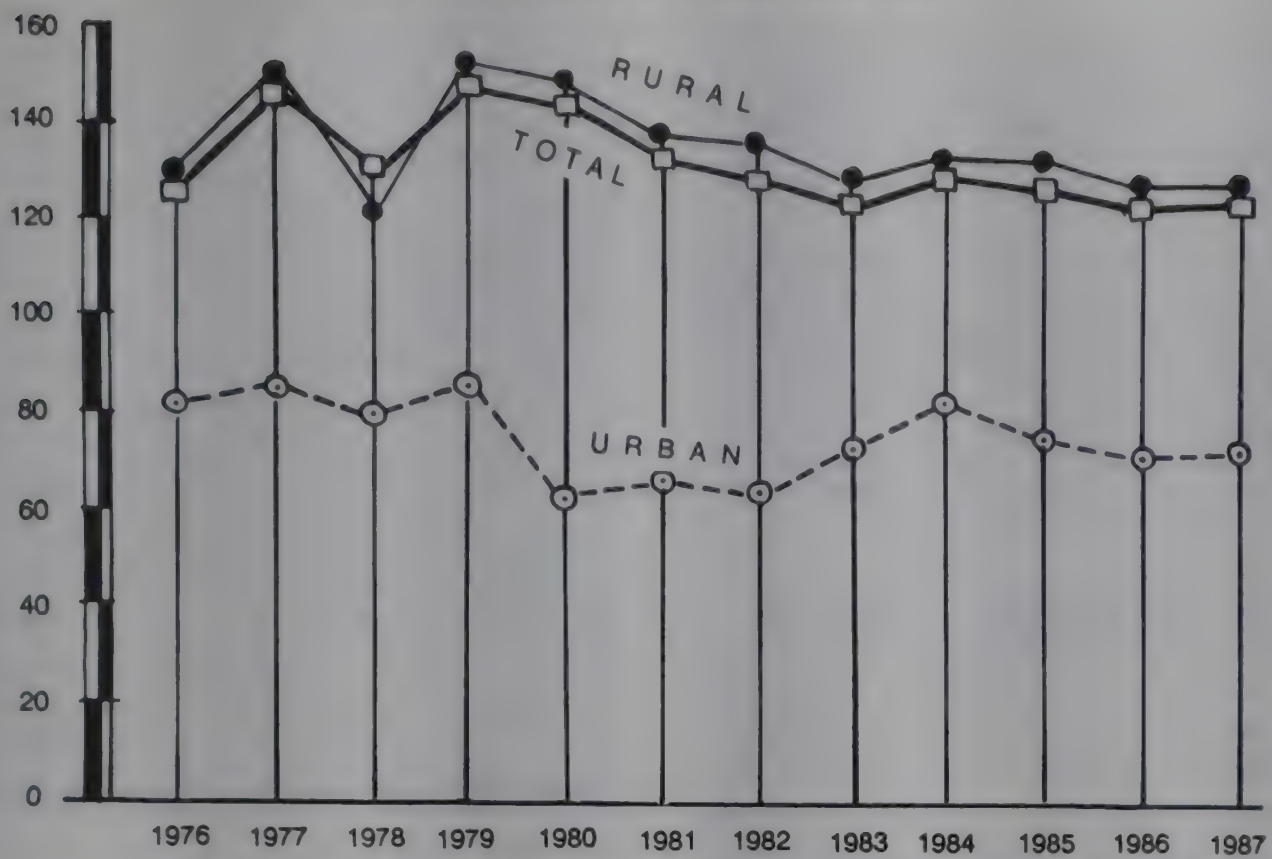
TABLE 2.8

Mortality Among Children Between 0-4 years, Orissa 1982-86

Year	Perinatal mortality rate	Stillbirth rate (Foetal death rate)	Neonatal death rate	Post-neonatal death rate	Mortality 1-4 yrs.
1982	66.74	11.72	80.41	52.43	11.72
1983	74.77	11.18	84.89	48.22	11.18
1984	70.62	14.12	77.26	55.30	14.12
1985	78.24	18.28	88.23	40.45	18.28
1986	79.01	14.81	83.97	49.47	14.86

Source : Vital Statistics Division, D.H.S, Orissa

Infant Mortality Rate, Orissa 1976-1987



in comparison to 64.74 in rural areas.

2.32 Post-neonatal mortality between 1981-86 remained fairly close to 50 in spite

of yearly fluctuations. Sample statistics from project districts also indicate similar level (51.6).

Neo-natal, Post-natal & Peri-natal death rate
Orissa - 1984-86

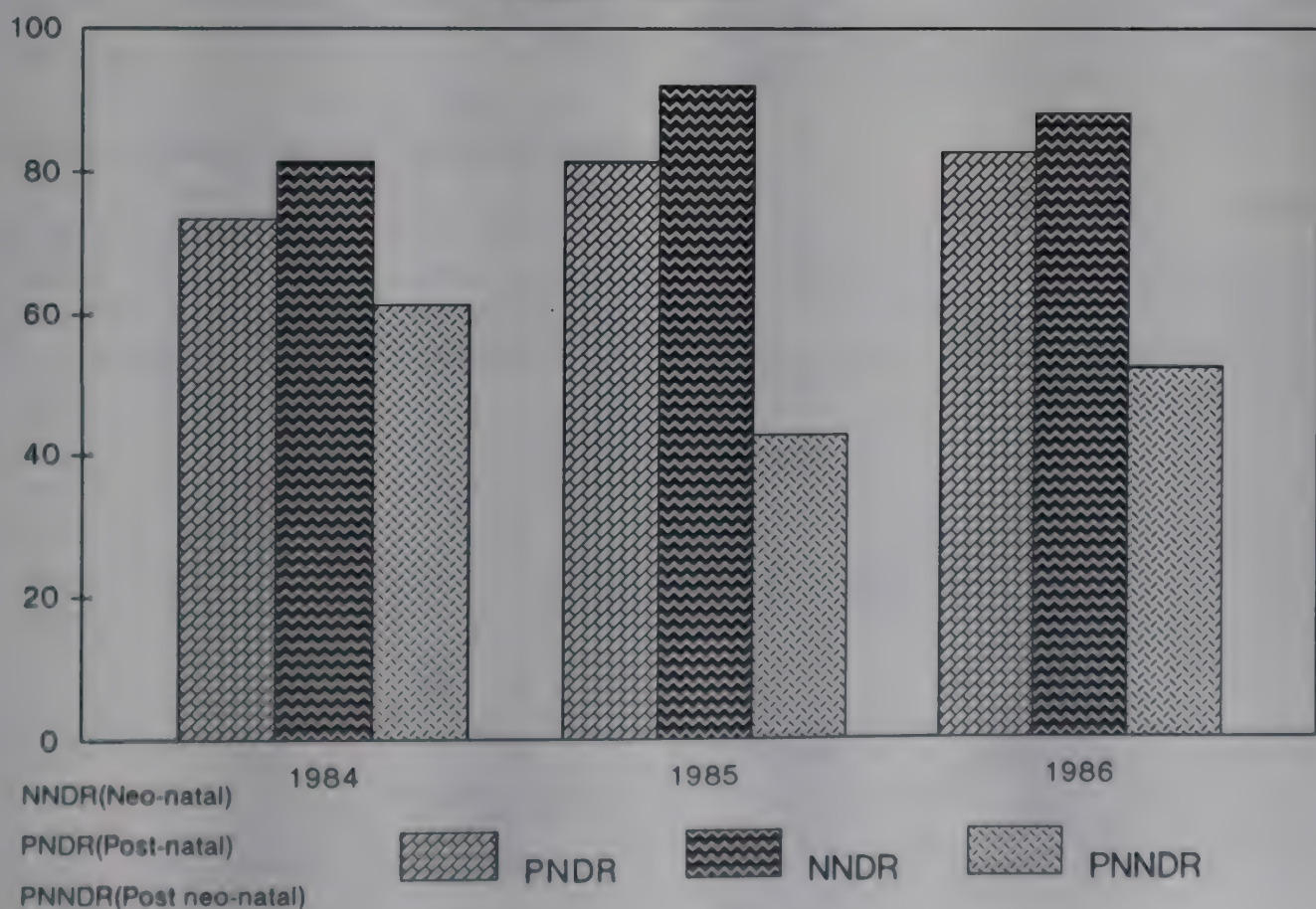


TABLE 2.9
Expectation of Life at Birth, Orissa (Years)

Period	Male	Female
1961-70	46.4	43.1
1971-75	50.2	47.6
1976-80	52.7	50.6
1981-85	55.2	53.6
1986-90	57.7	56.6

Source : Report of the Committee on Population Projection

Infant and child mortality differentials

2.33 Child mortality under ages 1, 2, 3 and 5 years, denoted by $q(1)$, $q(2)$, $q(3)$ and $q(5)$ respectively have been estimated from the 1981 census data for each district. Also variation of mortality by religion, education and occupation of mothers at the state level are provided. In comparison with the SRS estimate of infant mortality (143 in 1980), the number of deaths per 1000 live births before reaching the first birth day i.e. $Q(1)$ is 115. Similarly, $q(5)$ is found to be lower in comparison with SRS estimates. Rates for males and females taken separately also differ in the same direction. It is likely that deaths are under reported in the census. Even so, variations by districts are of interest for comparison indicating uneven child survival.

Inter-district variations

2.34 In comparison with the estimated child mortality at different ages at the state level, mortality rates in corresponding ages

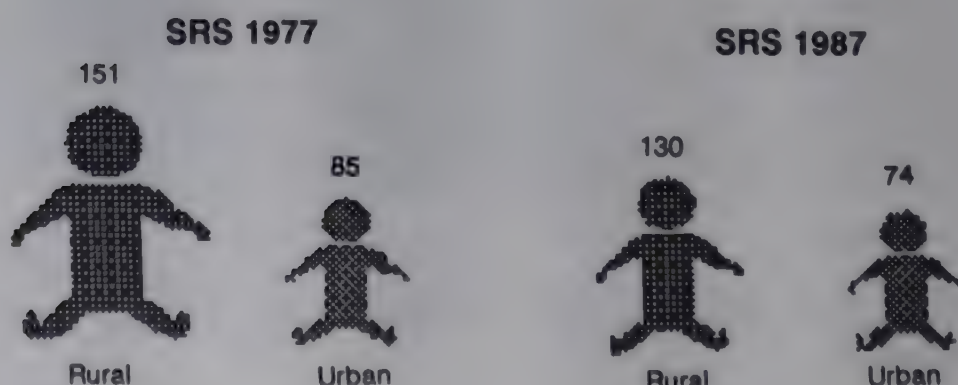
are higher in six districts, namely Balasore, Cuttack, Puri, Ganjam, Dhenkanal and Phulbani. The first four districts lie along the coast while the other two are land locked. Further, Phulbani stands out distinctly with nearly 40% tribal population. In the remaining seven districts, the proportion of tribal population is higher. In terms of availability of health care facilities, coastal districts have enjoyed an edge over others. Hence the causes for higher child mortality appear to lie in environmental and socio-cultural factors. In spite of low level of education and comparatively low per capita availability and utilization of health facilities, estimated child mortality rates in the tribal regions are comparatively lower. It appears that low population density and dry land of these areas offer better hygienic conditions for habitation as against densely populated and wetlands in the eastern part.

2.35 Differences in child mortality are wide among religious groups. Highest rates are observed in case of Hindus followed by Christians and Muslims, the respective $q(2)$ values being 149, 124 and 157. At the national level too, child mortality among Muslims is lower in comparison with Hindus. As against low rates at the national level, child mortality among Christians in the state is higher.

Female education and child mortality

2.36 The educational level of mothers bears a strong relationship with child mortality. For example, $q(2)$ in respect of children of illiterate mothers is 173 lowering down

Infant Mortality Rate



to 158 and 113 in case of literate but below middle school and undermatric mothers. In respect of mothers who are undergraduates and those with graduation or above educational level, further low values of 51 and 26 were estimated. Similar differentials by educational level of mother hold good at all ages of the child from the first to fifth year. Reduction in child mortality is however observed to be significant when the level of education of mothers is matric or above. This appears to be a critical stage in so far as development of greater awareness towards child health is concerned. Thus development of educational opportunities for women is closely linked to promotion of child survival and protection.

Occupational distribution and child mortality

2.37 From an occupational point of view, child mortality as measured by $q(2)$ is highest for manual workers (328) followed by agricultural labourers (179), cultivators (173) and non-manual workers (133) in rural areas. Child mortality in urban areas is higher for manual workers (155) compared with non-manual workers (144). It is significant to note that children of non-working women have a lower mortality with $q(2)$ value of 142 as against children of working mothers with $q(2)$ value of 175. It is known that women in rural areas are engaged mainly as agricultural labourers and are usually low paid. Females from higher socio-economic families are culturally discouraged from joining the labour force as earners for the family. The situation in urban areas is quite different whereas women in non-agricultural occupations enjoy comparatively better wages. Thus working women are identified with lower socio-economic status except in urban areas. Hence the difference in mortality between workers and non-workers is particularly high in rural areas. This suggests the vital need for economic development to improve earnings of the families particularly of women alongwith development of institutional and health care facilities in the villages as a strategy for reduction of child mortality.

Sex differences in child mortality

2.38 Between males and females any observed higher mortality in the latter category is generally explained by the operation of different social and cultural factors. But female mortality in comparison with mortality among males in all ages up to five years has been found to be lower. This holds good for all districts except Ganjam, Puri and Dhenkanal. The difference is insignificant in case of Dhenkanal with less than 1% observed in the $q(3)$ value. Excess of female mortality by age 5 was less than 1% in Puri and more than 5% in Ganjam. On the other hand Puri showed excess female mortality by age 3, i.e. $q(3)$. Sex differentials in mortality in the state show higher mortality among male children.

Life expectancy

2.39 The expectation of life at birth for males and females increased steadily over the year. Figures estimated for the year 1990 indicate that the rate of increase in life expectancy of females is slightly higher. However the average life expectancy continues to be lower. In view of special plans on maternal care in particular and development of women in general, it might be expected that life expectancy of females would catch up with that of counterpart males (Table 2.10).

TABLE 2.10
Sex-Ratio, Orissa 1901-1981

Year	Sex Ratio
1901	1037
1911	1056
1921	1086
1931	1067
1941	1053
1951	1022
1961	1001
1971	988
1981	981

Source : Census of India

2.40 On an average the number of children ever born to women aged 45-49 is slightly in excess of six without much rural-urban difference (as per project sample). In the same age group 4.3 children survived i.e. a loss of about a third of the number born.

Sex ratio

2.41 There has been an excess of males over the female population since 1971 onwards. At the start of the century, females outnumbered males in the total population over a long period of six decades. The changeover to a sex ratio favouring males was observed in 1971 census and continues. From a sex ratio of 1037 females for every thousand males in 1901 increasing to 1086 in 1921, it is observed that the ratio continued to decline in each subsequent decade. The decline was faster during 1921-71 and thereafter relatively slower. Since life expectancy increased for both sexes, evidently the gains in mortality were shared by the males and females though not evenly (Table 2.11).

2.42 Differentials in sex ratio occur in districts and by social groups. Among scheduled castes, a slightly higher ratio is observed. In the tribal community, females

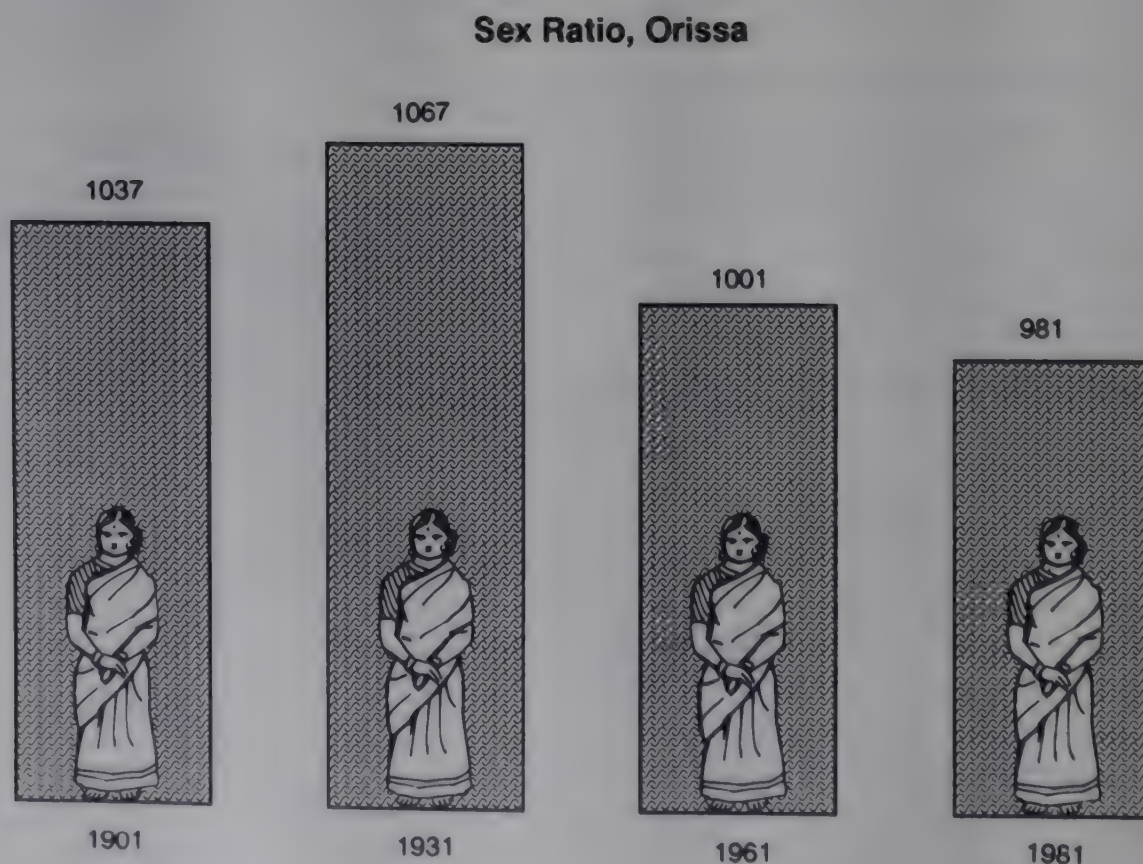
TABLE 2.11
Child Population, Orissa 1961-2001

Year	Population (0-14 Yrs) in million
1961	6.86
1971	6.30
1981	10.45
1986	10.80
1991	11.01
1996	11.32
2001	11.16

Source : Report of the Committee on Population Projection

outnumber the males (sex ratio 1022), even though wide variation is observed among different tribal groups. In all districts, except Ganjam and Kalahandi, males outnumber females as per the 1981 census. Similar results were also observed in the 1971 census.

2.43 The sex ratio at birth in 1984 was 110 males for 100 females. Some districts have shown considerable variation from the state average. Lowest sex ratio at birth (106) was observed in Mayurbhanj district followed by



Keonjhar, Sambalpur (107 each) and Sundergarh (108). In case of the districts, the ratio was either close to 110 or differed by one point on either side. Infant deaths are fewer among females (80 female infants for 1000 male infants in 1984). Up to 30 years, deaths among females are observed to be higher. It is only after this age that male death rate exceeds the female death rate. In urban areas female death rate is higher between 30-45 years and lower in younger ages.

Magnitude of migration

2.44 Migration plays a minor role in population changes. The outmigrants numbered 4.9 lakhs in 1971 and 5.3 lakhs in 1981. Female migration is comparatively higher on account of change of place after marriage. Based on these statistics and taking into account the surviving migrants of 1971, the net inter-decade migration between 1971-81 has been estimated to be 97.3 thousand males and 110.4 thousand females. Thus the decadal rate of migration is 0.88 for males and 1.01 for females.

Prospects for the future

2.45 Future trends in population growth will be mainly determined by the success or otherwise of the family planning programme. The Expert Committee on Population assumed an accelerated growth in the percentage of couples protected averaging 1.4 per cent per annum. That is to say by 2001, the couple protection rate would be around 53 per cent.

2.46 The life expectancy is expected to increase by 0.5 years till it reached 60 years and thereafter a slightly slower rate of increase (0.45 yr) has been assumed. In comparison with males, increase in life expectancy would be higher for females.

2.47 Based on the above assumption, the Net Reproduction Rate is expected to reach unity by the year 1997. The growth rate would decline to 1.7% in 1991 and 1.3% by 2001. The present population of the state would accordingly increase to 31 million by 1991, 34 million by 1996 and 36 million by 2001.

2.48 Structural changes implicit in the above assumption are

- The sex ratio would be favourable towards females because of relatively higher gains in mortality for females,
- The proportion of children under 15 is likely to decline from the current 40% level to about 31% by the end of the century.
- Working age population 15-59 years would increase by about 5 to 6 per cent from the current level of 54 per cent in 1981.
- Persons in the old age group of 60 and above would increase in 2001.

2.49 Districtwise variations would be influenced by the degree of success in family welfare, spread of health facilities and socio-economic factors including growth of urban population. Migration would be a factor for a few districts.

2.50 It may however be noted that the absolute increase of population as per projections is around 5.07 million for the 1981-91 decade and 4.86 million between 1991-2001. Thus during the period of two decades, the state will experience an average annual growth of around 0.5 million.

2.51 Evidently, the major part of the growth is accounted for by births added year after year. The child population in the state i.e., those aged 0-14 years which stood at 10.45 million in 1981 would be around 11.46 million by the year 2001 with an average annual growth of about 35 thousand per year. This is in spite of the decline in fertility because of the neutralizing effect of the growth in the child bearing population. It is however clear that the average increase in the size of child population declines over the two decades. The actual decline in absolute size occurs after 1996.

2.52 The size of child population during the Eighth Plan period (1990-95) on a pro rata basis is estimated to be around 10.9 million at the beginning of the plan increasing to 11.2 million at the final year. This directs our attention to the quantum of development needs.



CHAPTER III

Economic Situation

State income

3.1 Orissa is one of the most backward states in the country. The economy is predominantly agriculture based. The net state domestic product fluctuated between

Rs. 1114 crores to Rs. 1567 crores (1970-71 prices) during the last decade and the per capita income ranged between Rs. 431 to Rs. 551 (at 1970-71 prices) within the same period (Table 3.1). The per capita annual in-

TABLE 3.1

Net State Domestic Product of Orissa from 1979-80 to 1987-88 at Constant (1970-71) Prices

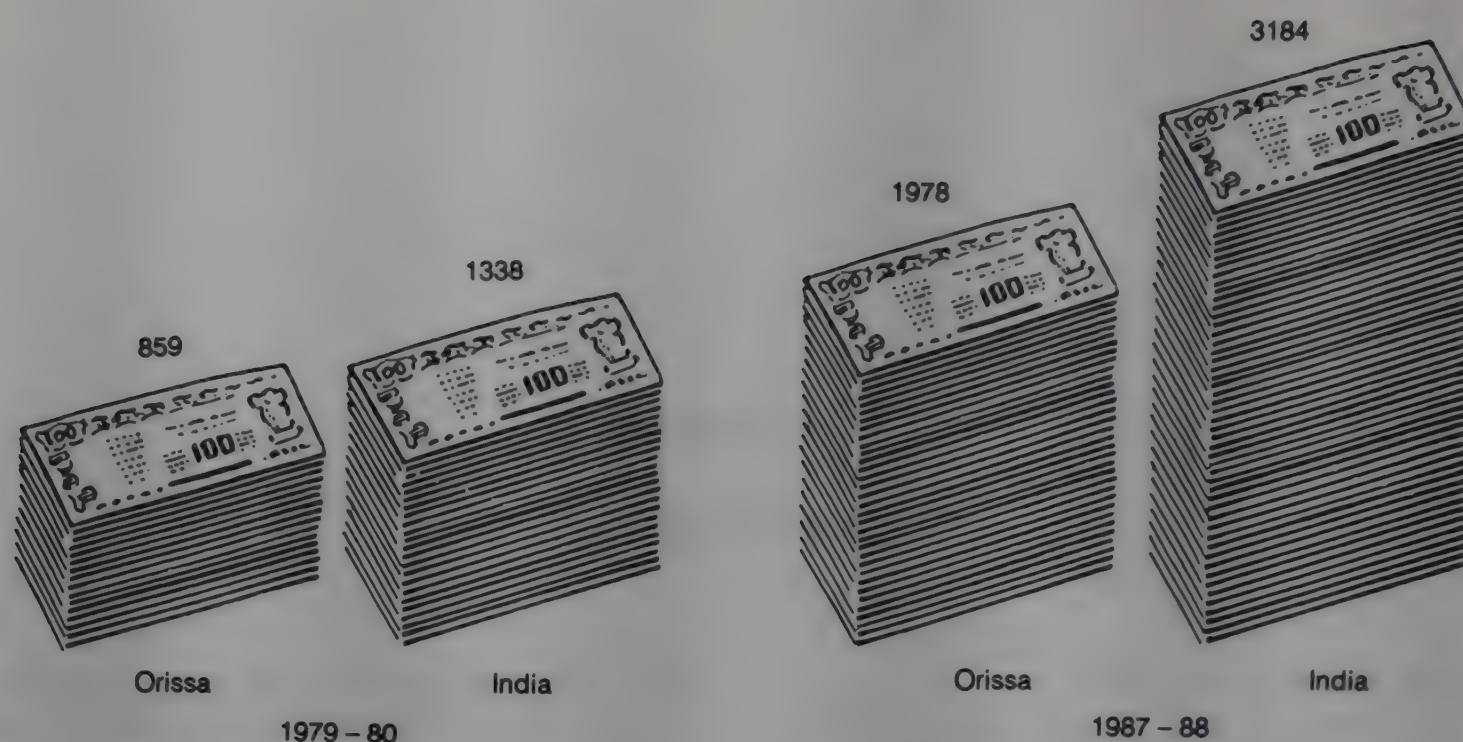
(Rs. in Crores)

Year	Primary sector	Secondary sector	Tertiary sector	Services sector	Total
1	2	3	4	5	6
1979-80	635 (57.0)	180 (16.2)	127 (11.4)	172 (15.4)	1114 (100.0)
1980-81	793 (63.5)	133 (10.6)	140 (11.2)	183 (14.7)	1249 (100.0)
1981-82	800 (63.0)	141 (11.1)	139 (11.0)	189 (14.9)	1269 (100.0)
1982-83	722 (59.2)	158 (12.9)	135 (11.0)	206 (16.9)	1220 (100.0)
1983-84	990 (65.2)	151 (9.9)	163 (10.8)	213 (14.1)	1517 (100.0)
1984-85	837 (61.4)	138 (10.1)	149 (11.0)	238 (17.5)	1362 (100.0)
1985-86	997 (63.2)	141 (8.9)	172 (10.9)	268 (17.0)	1578 (100.0)
1986-87	982 (62.7)	161 (10.3)	181 (11.5)	243 (15.5)	1567 (100.0)
1987-88 (Q)	882 (59.7)	172 (11.6)	172 (11.6)	252 (17.1)	1477 (100.0)

(Figures in Parenthesis denote percentages) Q = Quick estimates

Source : Directorate of Economics and Statistics

Per capita State Income Vs. National Income at Current Prices



come in 1986-87 was around Rs. 2024 at current prices (Table 3.2).

Economic Growth

3.2 Growth in the state economy has not been very stable due to frequent occurrence

of natural calamities such as drought, flood and cyclone. The annual compound growth rate of the economy was 2.8% in First Plan, 0.7% in Second Plan, 4.5% in Third Plan, 4.1% in Fourth Plan, 2.9% in Fifth Plan and 4.1% in Sixth Plan. It is however envisaged

TABLE 3.2

Per capita State Income Vs National Income

(In Rs.)

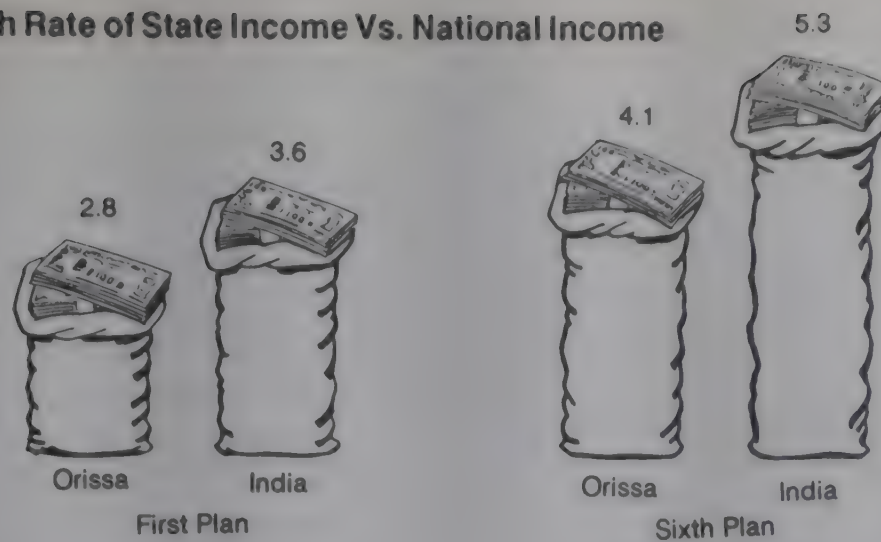
Year	At 1970-71 Prices		At Current Prices	
	Orissa	India	Orissa	India
1	2	3	4	5
1979-80	431	665	859	1338
1980-81	477	698	1173	1557
1981-82	476	720	1325	1743
1982-83	450	722	1330	1887
1983-84	550	764	1757	2186
1984-85	484	775	1671	2355
1985-86	551	798	1954	2721
1986-87	537	NA	2024	2975
1987-88	497	NA	1978	3184

(Q)

Q = Quick estimates

Source : Directorate of Economics and Statistics

Growth Rate of State Income Vs. National Income



that a growth rate of more than 6% would be achieved in the Seventh Plan (Table 3.3).

Sectoral contribution

3.3 Contribution of primary sector (Agriculture, Forestry, Fisheries, Animal Husbandry

etc.) to the net State Domestic Product has been significantly higher ranging between 67.2% and 61.4% in the preceding three plan periods, which is indicative of the backwardness of the state's economy. The contribution of secondary (manufacturing) sector

TABLE 3.3

Annual Compound Growth Rate of State Income and National Income

Period	Growth rate (%)	
	Orissa	India
1	2	3
First Plan		
(1951-56)	2.8	3.6
Second Plan		
(1956-61)	0.7	4.0
Third Plan		
(1961-66)	4.5	2.2
Annual Plans		
(1966-69)	9.2	4.0
Fourth Plan		
(1969-74)	4.1	3.4
Eighth Plan		
(1974-78)	2.9	5.2
Annual Plan		
(1978-79)	6.7	5.6
(1979-80)	(-) 16.1	(-) 5.2
Sixth Plan		
(1980-85)	4.1	5.3
Seventh Plan		
(1985-86)	15.9	5.1
(1986-87)	(-) 0.7	3.8
(1987-88)	(-) 5.7	NA

Source : Economic Survey, Orissa

Expenditure for Social Sector

1st Plan	2.99
2nd Plan	13.67
3rd Plan	37.23
4th Plan	38.68
5th Plan	60.67
6th Plan	183.85
7th Plan*	349.30

* Outlay

has remained more or less constant at 10% to 11%. The tertiary sector has however registered a continuous increase in its share from 22% in Fourth Plan to 29% in Seventh Plan (Table 3.4). The growth rate of primary sector has been 4% in the Fourth Plan, 2.1% in Fifth Plan, 5.6% in Sixth Plan and 9.6% in the first two years of Seventh Plan. The secondary sector registered sluggish growth rates of 4.0% in Fourth Plan, 5.1% in Fifth Plan and 5.2% in Sixth Plan period. In the first two years of Seventh Plan it has registered a growth rate of only 3.4%. Growth of tertiary sector has been consistently increasing from 4.0% in Fourth Plan, 4.3% in Fifth Plan, 5.3% in Sixth Plan, and 7.0% in the first 2 years of Seventh Plan. No major shift has been observed in the pattern of contribution of different sectors to the state's economy as a result of which the state has remained relatively backward.

Sector Plan outlay / Expenditure

3.4 The total State Plan outlay rose from

Rs. 18.42 crores during the First Plan to Rs. 2700 crores in the Seventh Plan (Table 3.5).

3.5 Within the social sectors, the outlay under education has been consistently higher than the other social sectors in all the plan periods. The outlay increased from Rs. 7.98 crores in First Plan to Rs. 175.50 crores in the Seventh Plan. At current prices, the outlay under education progressively increased but in terms of its proportion in the total outlay, it decreased from 8% in First Plan to 4.3% in Sixth Plan and recovered to 6.5% in the Seventh Plan. This is also true in case of medical and public health, the share of which increased from 3.5% in the First Plan to 5.3% in Third Plan but decreased to 1.9% and 2.1% in the subsequent plan period although the outlay under this sector increased from Rs. 0.88 crores in First Plan to Rs. 70.00 crores in Seventh Plan, its share in the total outlay decreased from 4.8% in First Plan to 2.6% in the Seventh Plan. Social Welfare sector including child and women welfare appears

TABLE 3.4

Percentage Contribution of Primary, Secondary & Tertiary sectors to N.S.D.P.

Period	Primary (Agri. & Allied, Forestry, Fishery & Animal hus., Mining & quarry)	Secondary (Large & Small Industries construction, gas, water supply & electricity)	Tertiary (Railways, Transport, Banking & other services)	Total
1	2	3	4	5
First Plan (1951-56)	69.3	6.9	23.8	100.0
Second Plan (1960-61)	64.5	11.7	23.8	100.0
Third Plan (1965-66)	63.8	13.6	22.6	100.0
Annual Plans (1968-69)	67.5	10.4	22.1	100.0
Fourth Plan (1973-74)	67.2	10.8	22.0	100.0
Fifth Plan (1977-78)	65.1	11.7	23.2	100.0
Sixth Plan (1984-85)	61.4	10.1	28.5	100.0

Source : Directorate of Economics and Statistics

TABLE 3.5

State-Plan Outlay/Expenditure for Social Sector

(Rs. in Crores)

Social Sectors/ Sub sectors	1st Plan	2nd Plan	3rd Plan	4th Plan	5th Plan	6th Plan	7th Plan (outlay)
1. Education	1.47 (7.98)	6.46 (7.46)	17.61 (7.84)	15.11 (6.06)	26.57 (5.85)	67.05 (4.27)	175.50 (6.5)
2. Medical and Public Health	0.64 (3.47)	3.50 (4.04)	11.99 (5.34)	7.21 (2.89)	8.51 (1.88)	33.42 (2.13)	54.04 (2.02)
3. Water Supply and Sanitation	0.88 (4.78)	—	2.67 (1.19)	7.65 (3.07)	13.40 (2.95)	45.06 (2.87)	70.00 (2.59)
4. Housing and Urban Development		3.62 (4.18)	4.85 (2.16)	8.60 (3.45)	12.08 (2.66)	36.96 (2.35)	47.30 (1.75)
5. Social Welfare	—	0.09 (0.10)	0.11 (0.05)	0.11 (0.04)	0.11 (0.02)	1.36 (0.09)	2.00 (0.07)
6. All Social Sectors	2.99 (16.23)	13.67 (15.79)	37.23 (16.58)	38.68 (15.39)	60.67 (13.37)	183.85 (11.70)	349.30 (12.94)
7. State Plan Outlay/ Expenditure	18.42	86.59	224.60	249.34	453.62	1571.82	2700.00

N.B. : Figures in Parenthesis indicate the proportion of sectoral outlay to total plan outlay

Source : State Plan Documents

to have attracted the least attention of the planners. It started with an outlay of Rs. 9 lakhs in Second Plan and in the current plan period its outlay is Rs. 2.00 crores which accounts for less than 0.1% in the total State's outlay. It could have been quite interesting to compare the expenditure on different components of social services sectors for each district in the state to correlate the child welfare with the level of expenditure or even to compare per capita actual expenditure in individual districts. There is a need to build up such an information base to identify the priority areas with respect to child and women development.

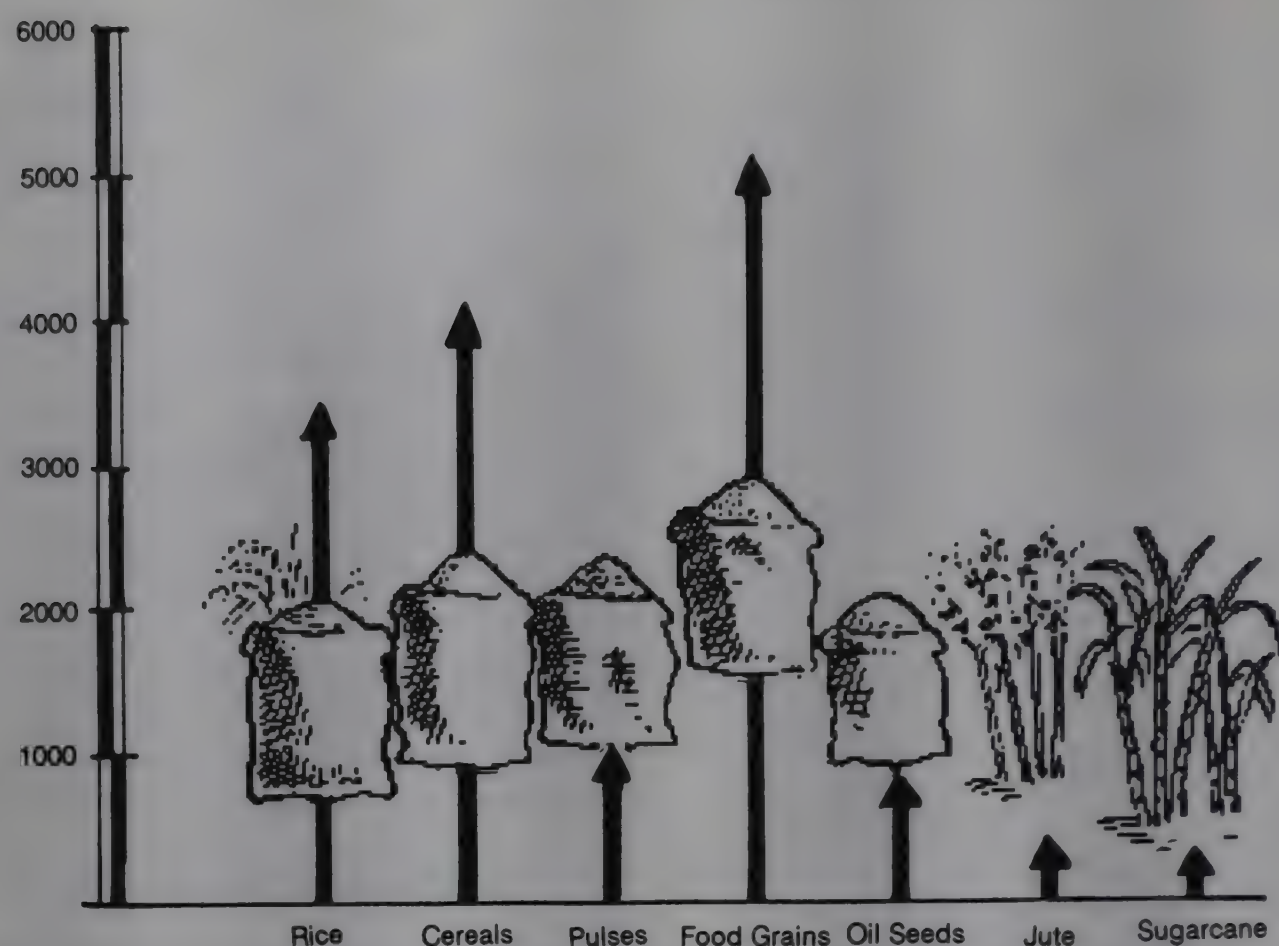
3.6 Thus in almost all the plans highest priority was given to Irrigation and Power sectors followed by Agriculture & Allied services. In a poor State like Orissa, such pattern of investment in economic sectors was considered to be more appropriate to meet the increasing demand of primary sector production. Consequently, the Social services sectors consisting of Education, Health and Family Welfare, Water Supply

and Sanitation, Rural Housing and Social Welfare (women & child welfare) received low priority in terms of outlays. Though the outlay on social sectors increased from a paltry Rs. 2.99 crores in First Plan to about Rs. 350 crores in the Seventh Plan, the share of this sector in total outlay has fallen from 16.23% in First Plan to 12.94% in the Seventh Plan. This sector which deals with building up of human infrastructure and develops human resources was not accorded due priority. Higher priority was given to economic sectors. There is a need for rethinking in fixing up plan priorities keeping in view the basic needs of the population.

Agricultural production

3.7 Agricultural production in the state is characterized by wide fluctuations over years as more than 70% of the net area sown is dependent on vagaries of monsoon. Due to frequent occurrence of natural calamities in the state, agricultural production has not stabilised and no consistent increasing trend is discernible in agricultural production.

Production of Principal Crops 1987-88 ('000 tonnes)



However, the peak production was registered in food grains during 1985-86, when it reached the level of 70 lakh tonnes. Thereafter, the food grain production declined to 63.8 lakh tonnes in 1986-87. The period 1987-88 was one of the worst drought affected years in the history of Orissa when almost all districts of the state reeled under

the spell of acute drought. The average food grain production in the state (5 years average) has been about 55.8 lakh tonnes of which cereals constitute 46.6 lakh tonnes and pulses 9.2 lakh tonnes. The State also produced 8.2 lakh tonnes of oilseeds, 3.1 lakh bales of jute, and 2.79 lakh tonnes of sugarcane in 1987-88 (Table 3.6). The

TABLE 3.6

Production of Principal Crops

('000 tonnes)

Crops	1979-80	1984-85	1985-86	1986-87	1987-88
1. Rice	2918	4172	5226	4834	3471
2. Total Cereals	3305	4760	5868	5329	4048
3. Total Pulses	567	849	1100	1049	1011
4. Total Food Grains	3872	5609	6968	6378	5059
5. Oil Seeds	279	682	772	757	820
6. Jute	*320	355	416	273	314
7. Sugarcane	*282	271	310	272	279

* in '000 bales

Source : Directorate of Agriculture

fluctuations in the production of these crops over different years have been registered to be only marginal. Average yield rates of almost all the crops have been found to be fairly low due to lower doses of inputs applied per hectare as the farmers of the state are by and large extremely poor with marginal and small land holdings without adequate irrigation facilities.

3.8 An essential change in the cropping pattern has been noticed of late in the diversion of submarginal lands under paddy to pulses and oilseeds. As a result, production of pulses has increased from 4.75 lakh tonnes at the end of fourth plan to 10.72 lakh tonnes by mid seventh plan (Table 3.7).

3.9 The per capita availability of cereals has shown a fluctuating trend due to impact of drought from 572 grams in 1973-74 to 520 gms in 1977-78, 585 grams in 1983-84 and 404 gms in 1986-87. But per capita daily availability of pulses shows almost a consistently increasing trend from 56 gms in 1973-74 to 98 gms in 1986-1987. The higher protein intake in the households provides better nutritional standard for children.

Industrial production

3.10 The state is industrially backward. There are 1871 registered industrial units in the state which employ about 1.5 lakh per-

sons. The total value added by manufacture from these organized sector units has been roughly Rs. 387 crores during 1985-86. (Table 3.8). However, the pace of industrial development was accelerated through a dynamic policy for industrial promotion through modernization, liberalization of investment procedures, grant of concessions and loan facilities, etc. In the corporate sector 184 large and medium units have been set up since December, 1987 with a total investment of Rs. 848 crores.

3.11 In the small-scale sector spectacular achievements have been registered. The total number of units has gone up to 32922 by December, 1988. This sector has created employment potential for 2.45 lakh persons. Expansion of cottage industries and handloom units has been another important feature in the field of industrial development. This has a positive impact in providing employment to a large number of rural artisans.

3.12 An analysis of relevant industrial ratios presented in Table 3.9 reveals that the industrial output per worker, value added per worker and annual emoluments received per worker are consistently increasing. The value of output per worker which was Rs. 1.05 lakh in 1979-80 has increased to Rs. 1.67 lakhs by 1985. Within this period,

TABLE 3.7
Per capita Availability of Food Grains

Period	Total Production (000MT)			Per capita Availability per day (in grains)		
	Cereals	Pulses	Total	Cereals	Pulses	Total
4th Plan 1973-74	4800	475	5275	572	56	628
5th Plan 1977-78	4882	679	5561	520	72	593
6th Plan 1983-84	5942	1059	7001	585	104	689
7th Plan 1986-87	* 4405	1072	6476	404	98	502

* Production of Cereals was low because of Natural Calamities

Source : Orissa Agricultural Statistics

TABLE 3.8

Progress of Registered Factories (Organised Industries) in Orissa

Period	No. of registered factories	Employment (No.)	Value added by manufacture (Rs. in lakhs)
1979-80	1831	1,19,088	25551
1980-81	1660	1,34,011	21139
1981-82	1764	1,36,130	21830
1982-83	1729	1,41,300	24626
1983-84	1671	1,37,961	23731
1984-85	1713	1,34,629	22389
1985-86	1871	1,41,624	38715

Source : Directorate of Economics and Statistics

the value added per worker also went up from Rs. 12,000 to Rs. 24,000. The average emoluments per worker have gone up from Rs. 8,500 to Rs. 14,400. This welcome trend among industrial workers has created potential for providing better food and nutrition to the households in general and children in particular.

The employment situation

3.13 In Orissa, of the total 26.41 million population (1981 census) 32.7% are main

workers (employed for more than six months in a year) and 5.2% are marginal workers (employed for less than six months in a year) and the remaining 62.1% are non-workers. The population in the working age group of 15-59 years constitutes 56.3%. Between 1971 and 1981 there has been an increase of 26.0% in the work force, but the participation rate marginally increased from 31.2% in 1971 to 32.8% in 1981 (Table 3.8). The distribution of workers in the primary, secondary and tertiary sectors works out to 78%, 8% and 14% respectively. Occupationally,

TABLE 3.9

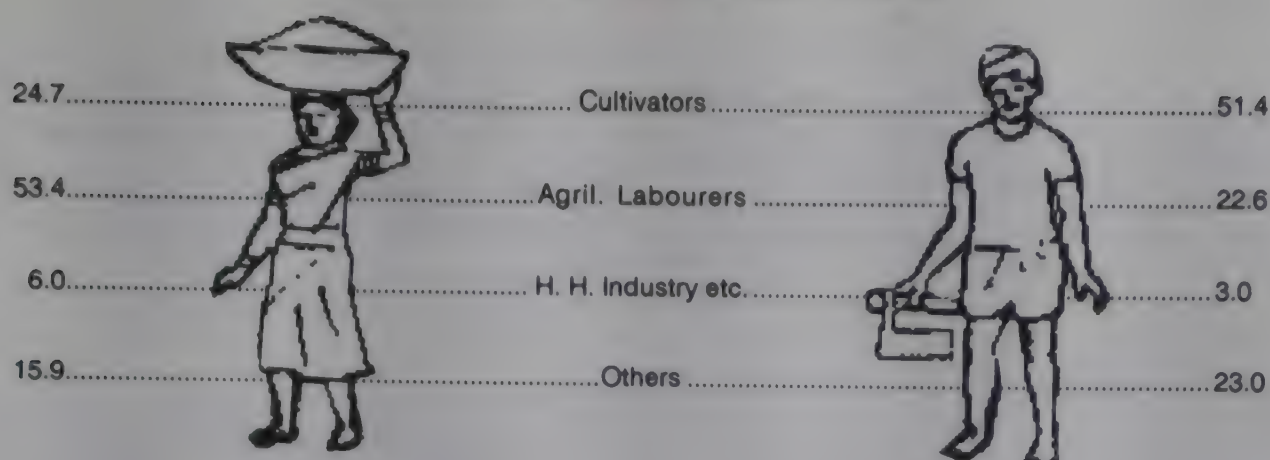
Selected Industrial Ratios (Orissa)

Period	Value of output per worker (Rs. in '000)	Value added per worker (Rs. in '000)	Annual emoluments per employee (Rs. in '000)
1979-80	105	12	8.5
1980-81	102	17	9.1
1981-82	116	16	10.0
1982-83	122	17	11.6
1983-84(P)	89	16	12.9
1984-85(P)	167	24	14.4

(P) Provisional estimates

Source : Report on Annual Survey of Industries

Distribution of Workers by Area/Sex



among main workers there are 47% cultivators, 27.6% agriculture labourers, 3.5% workers in household industries and 21.9% in other activities (Table 3.10).

3.14 The work participation rate of main workers is observed to be higher among

tors for pushing more and more women folk particularly among the economically depressed sections of the population into the labour market. In 1971, the female work participation was 6.8% which increased to 10.9% in 1981. The increase is more significant in rural areas (from 6.8% to 11.3%)

TABLE 3.10
Economic Participation Rates 1971 & 1981

Area	1971			1981		
	Male	Female	Total	Male	Female	Total
Rural	55.8	6.8	31.3	55.1	11.3	33.2
Urban	50.6	6.5	30.4	49.4	7.7	30.1
Combined	55.3	6.8	31.2	54.4	10.9	32.8

Source : Census of India 1971 & 1981

males than females in both urban and rural areas. The trend is reverse in case of marginal workers particularly in rural areas. However, the proportion of workers (main + marginal) is still higher among males (56.1%) than females (19.7%). One interesting trend is that in the recent past, the economic participation rate among women has started increasing steadily mainly because of their increasing literacy levels and the employment opportunities thrown open to them in the various development activities including poverty amelioration programmes. Economic compulsion is also one of the fac-

than in urban areas (from 6.5% to 7.7%) mainly because of the more labour-intensive nature of work in rural areas.

Characteristics of women workforce

3.15 Although the sex composition of the population is nearly balanced, females account for only 16.4% of the work force. This is no doubt better than 10.8% in 1971. Of the total female work force, more than 92% are in rural areas. In other words, majority of the women work force is engaged in primary sector activities like cultivation, farm labour and household industries. As may be

seen from Table 3.11, of the women workers in rural areas (13.1%), nearly 83% are directly dependent on agriculture, either as cultivators (26.4%) or wage earners (56.3%). The women headed farms in the state are few in number. As a result, majority of the women workers particularly those belonging

Unemployment

3.16 In the predominantly agrarian based economy of Orissa with agricultural development yet to make a significant breakthrough, a higher ratio of work participation is not a sign of development, rather it

TABLE 3.11

Distribution of Workers by Area / Sex (1981)

(%)

Category of workers	Urban			Rural			Total		
	M	F	T	M	F	T	M	F	T
1. Main Workers	49.4	7.7	30.1	55.1	11.3	33.2	54.4	10.9	32.8
a) Cultivators	7.5	4.3	7.1	57.1	26.4	51.8	51.4	24.7	47.0
b) Agril. labourers	6.6	19.0	8.1	24.6	56.3	30.1	22.6	53.4	27.6
c) H. H. Industry etc.	3.4	7.2	3.8	2.9	5.9	3.4	3.0	6.0	3.5
d) Others	82.5	69.5	81.0	15.0	11.4	14.7	23.0	15.9	21.9
Total	100.0 (8.2)	100.0 (1.1)	100.0 (9.3)	100.0 (63.8)	100.0 (13.1)	100.0 (76.9)	100.0 (72.1)	100.0 (14.1)	100.0 (86.2)
2. Marginal workers	0.1	1.8	1.2	1.9	9.7	5.8	1.7	8.8	5.2
3. Non-workers	50.5	90.5	68.7	43.0	79.0	61.0	43.9	80.3	62.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Figures in parentheses are in lakhs)

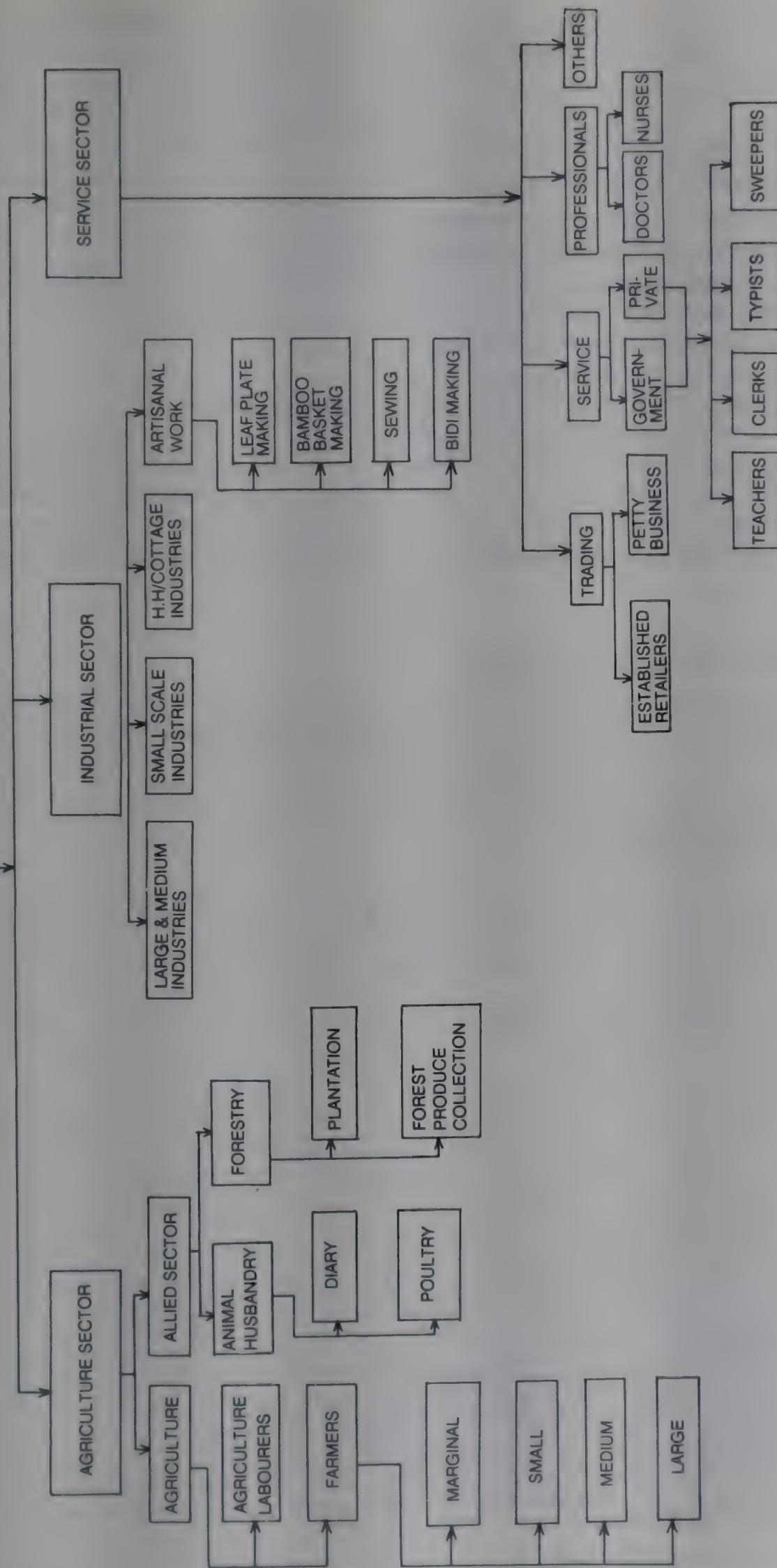
Source : Census of India, 1981

to under privileged sections of the population like ST, SC small and marginal farmers, artisanal households etc., are engaged in farm work as daily wage earners. Some of the farm operations like transplanting, weeding, winnowing and cleaning, which are all labour-intensive, are almost exclusive to women workers. Another important activity where women are generally engaged in higher proportion is household/cottage industry sector. Activities like making of leaf plates, bamboo baskets, beedies, grass products sewing, absorb a large number of women workers and even child labour. This is true for both urban and rural areas.

presents a situation where due to low productivity, persons in the periphery of work force like children, housewives, old people etc., are compelled to work to supplement the household income. So, the problem related to both the unemployment of persons in the working age group and the underemployment of those who are considered as workers.

3.17 According to the Annual Plan (1988-89) document, the unemployment in the State stood at 1.45 millions at the beginning of the Seventh Plan. The annual addition to labour force is estimated to be 0.17 million. In other words, by 1988 nearly 1.96 million

MAJOR ECONOMIC ACTIVITIES PURSUED BY WOMEN



persons would need employment assistance. With a reported employment generation for 1.22 million persons during the first three years of the current plan, the magnitude of unemployment at the beginning of 1988-89 is expected to be at 0.74 million.

3.18 The problem of chronic unemployment in Orissa is not so serious as compared to more developed states. But states with unemployment rates lower than the average All India rate particularly Madhya Pradesh, Orissa etc. show higher incidence of poverty. One explanation for this may be that the unemployment rates are generally observed to be lower among, SC, ST and other poorer categories like agricultural labourers, marginal and small farmers, artisanal households etc. which are more concentrated in

these states. A study carried out by ORG in Koraput district found a lower unemployment rate among ST (0.6%) than SC (1.6%) and others (1.9%). Similar studies carried out by ORG confirm this trend in other districts too. The scheduled groups are more dominant among agricultural labourers, marginal farmers and small farmers. Therefore, unemployment rate is generally found to be lower among these categories as can be seen from Table 3.12.

Underemployment

3.19 The problem with poor groups is the large scale incidence of underemployment. The ratio of workers reported to be underemployed is generally found to be inversely

TABLE 3.12
Unemployment and Underemployment

Regions	Categories of households					
	*AL	MF	SF	MDF	LF	AVER.
1. Rengali area (Keonjhar & Dhenkanal Districts)						
% unemployed	0.2	0.3	1.8	0.8	1.3	0.8
% underemployed	39.7	40.0	36.6	27.0	15.4	37.4
Days underemployed	145	123	104	98	79	120
2. Mahanadi area (Puri and Cuttack)						
% unemployed	0.4	—	0.9	1.2	1.7	0.9
% underemployed	36.2	—	17.1	7.3	2.6	19.0
Days underemployed	80		79	85	23	80
3. Kalahandi District						
% unemployed	0.7	—	—	—	—	0.1
% underemployed	46.1	—	22.7	7.7	—	20.9
Days underemployed	15	—	155	156	—	154

* AL = Agricultural labour, MF = Marginal Farmer, SF = Small Farmer, MDF = Medium Farmer, LF = Large Farmer, AVER = Average

Source : ORG's Surveys 1983, 1984 & 1985

related to holding size. Some of the sample studies carried out by ORG in different district of the state conform to this trend as can be seen from Table 3.10. Not only that the rate of underemployment is high with poorer sections but even the number of days seeking employment tend to be higher with them.

3.20 Therefore, in spite of a higher level of employment rate, the poorer groups continue to suffer from poverty. Besides, underemployment, there are other reasons too. Firstly, the wages received by the poorer groups are generally lower and most of the attached/contacted/bonded labourers be-

long to this category. This is particularly more relevant for women and child labour who in general are discriminated most. Secondly, the activities where workers engaged are more traditional and less remunerative, the worst suffers are women and children. Due to lower wages, the productivity is less and with more underemployment the household income is pulled down further. In order to supplement the family income, those in the periphery of the labour force enter as workers and the vicious circle thus continues to engulf the poverty stricken population.

CHAPTER IV

Poverty Alleviation

Failure of 'Trickle Down'

4.1 Alleviation of poverty and unemployment are the cardinal goals of development planning in the post-independent period. But a more direct attack on poverty was planned when it was realized that the 'trickle down' theory did not help in reducing poverty and unemployment. Poverty is inextricably linked *inter alia* with poor economic condition and deprivation of improved levels of living. Poverty expressed in terms of food intake is a stage where a poor family cannot afford an adequate diet. As a result, the growing child suffers and becomes vulnerable to under-nutrition, malnutrition, morbidity and mortality.

Major factors contributing to the high incidence of poverty in Orissa are :

- i) Slow rate of growth of economy,
- ii) Overwhelming dependence on agricultural production,
- iii) Continuously higher growth in population,
- iv) Skewed distribution of development benefits,
- v) Uneven distribution of assets,
- vi) Lack of improved skills/methods of production, and
- vii) Larger concentration of scheduled population.

Poverty groups

4.2 The phenomenon of poverty is common to both rural and urban areas but is more pronounced in the former. In the rural areas, the poor consist of small and marginal land-holders, landless labourers and self employed artisans besides the handicapped and the destitutes. Small and marginal holdings account for about 38% of the total operational holdings in the state. In the urban areas, poverty is mainly found among those engaged in unskilled jobs in the informal sector. Urban poverty, in a way, may be considered as an overflow of rural poverty since most of the poor are migrants from rural areas seeking employment. Among the different social groups, poverty is widespread among Scheduled Tribes and Scheduled Castes.

Characteristics of the poor

4.3 The poor are characterised by low level of income, inadequate employment, low level of asset possession, higher indebtedness and lack of skills. They are largely illiterates and easily exploited; a large segment are women and a significant segment are children and most of them are, invariably, unskilled. They are less mobile and have a very low status in the society. They lack leadership and hence are powerless. They have less bargaining power and most of them are underpaid. Thus, their wages

are low and they suffer from both under-nourishment and malnutrition which decreases their productivity. Most of them cannot afford to educate their children. The report of the International Institute for Population Science on Fertility, Mortality and related factors in Orissa infers that with rising economic status education of boys and girls tends to rise along with the differential in the attendance rate between girls narrowing down. A majority of the poor are not able to derive adequate benefits from the general growth of economy which, therefore, calls for special measures to :

- i) improve the nutritional status of the poor,
- ii) provide employment opportunities, and
- iii) improve the economic level of the poor families.

Such measures would lead to increase in the standards of living of the poor.

Poverty line

4.4 In India, poverty line is equated with the level of subsistence and is generally defined on the basis of minimum calorie intake which is needed for an average person to live with a capacity to work and expressed in terms of a minimum consumption expenditure. The basic premise is that nutrition is considered as the most essential of basic needs and that without adequate amount of fuel, clothing and education, people may still continue to live but without food they most certainly, will not. However, the food habits of the people are so varying that it would be difficult to arrive at a common consumption basket. For example, among tribals, who are dependent on forest fruits, edible roots etc., which are more nutritious and carry a very high calorific value, the minimum calorie intake concept may not hold good.

4.5 Measuring poverty on the basis of certain social indicators is presently being strongly advocated. Various research workers like Ranjit Dhar and Ram Mohan Rao, Sarveshwar Rao and Despande, David Morris, Wolf Scott, Falisa M. Kazen, Khusro etc., have defined poverty based on different social indicators like life expectancy,

literacy, mortality, housing facility, social infrastructure and other public services.

4.6 However, the definition of poverty line by the 'Task Force on projections of Minimum Needs and Effective Consumptions Demand' set up by the Planning Commission in 1977, as a mid-point of monthly per capita expenditure class having a daily calorie intake of 2400 in rural areas and 2100 in urban areas is presently being widely used in the country. On the basis of the calorie intake, the poverty line was defined as the per capita consumption expenditure of Rs. 76 in rural areas and Rs. 88 in urban areas (at 1979-80 prices). This was later on raised to Rs. 107 for rural areas and Rs. 122 for urban areas (at 1984-85 prices). Accordingly a family of five members is considered to be below the poverty line (BPL) if its annual income is less than Rs. 6400 in rural areas and Rs. 7200 in urban areas.

Poverty incidence

4.7 Research workers have followed different norms to determine the poverty incidence until it was agreed on the calorie requirement for sustenance. Dandekar and Rath (1971) are the pioneers in estimating poverty in different states by using NSS consumer expenditure data. According to their estimates 55.6% of population in urban and 43.9% in rural Orissa take inadequate amount of calories. Ahluwalia (1976) adopting a per capita consumption expenditure of Rs. 15/- per month and demonstrated that between 1957-58 to 1973-74, the rural poverty in Orissa almost hovered around 60%. L. K. Datta (1977) using the same norm and for the same period showed almost a similar trend but put the rural poverty at a higher percentage (around 75%). Gupta, Singh and Datta (1982) estimated 72.5% of rural population and 46.7% of urban population in Orissa to be living BPL during 1972-73. However, this is reported to have decreased to 63.6% in rural areas and 34.3% in urban areas in 1977-78. Estimates of poverty in Orissa as given by Planning Commission based on NSS data on consumption expenditure are 64% in 1970-71, 68.6% in 1972-73, 66.4% in 1977-78 and 42.8% in 1983-84

(based on 38th round of NSS). According to Hanumantha Rao (1985) the rural poverty in the state which was around 68% in 1977-78 is reported to have declined to 45% in 1983-84. But there are studies including those completed by ORG in different districts of the state which show a very slow reduction of poverty in the state in spite of implementing various poverty amelioration programmes on a large scale particularly in rural areas. In fact, based on the per capita income at current prices (Table 4.1) Orissa which ranked 13th among the 16 major

TABLE 4.1
Rank Order of Orissa by Annual Per Capita Income (at Current Prices) (In Rs.)

Year	Orissa	All India
1973-74	699 (13)	870
1977-78	845 (15)	1194
1983	1636 (15)	2186

Source : Monthly Commentary Annual Number
December, 1987

states during 1973-74 (at a per capita income of Rs. 699 as against the all India average of Rs. 870) slid down to 15th place during 1977-78 (at Rs. 845 against all India figure of Rs. 1,194) and 1983-84 (at Rs. 1636 against all India figure of Rs. 2186). According to the Seventh Plan(1985-90) about 90% of the total ST and SC families were living BPL at the beginning of the Sixth Plan.

4.8 More or less similar trends emerge when per capita consumption is considered

(Table 4.2). According to 38th Round of N.S.S. (1983-84), the per capita monthly consumer expenditure in Orissa was Rs. 98.75 in rural areas and Rs. 151.42 in urban areas which is substantially lower than the all India average of Rs. 112.45 (rural) and Rs. 164.03 (urban). Undernourishment is extensive for the population as a whole due to low consumption expenditure. A more depressing picture is obtained from the per capita monthly expenditure on milk products (1983) which has been as low as only Rs. 1.50 in rural areas and Rs. 6.10 in urban areas when compared to all India average of Rs. 8.45 and Rs. 15.15 respectively. In some states like Punjab and Haryana these have been above Rs. 30 per month per capita. The expenditure on items like edible oil and clothing has also been the lowest in the country (Table 4.3). Because of a very low level of living, the percentage of expenditure on food items alone has been as high as 73.64% of the total in rural areas and 65.31% in urban areas during 1983 (Table 4.4).

Magnitude of poverty

4.9 Information on poverty incidence in different districts and among different sections of the population in the state is scanty and most of the estimates from the national surveys like NSS are available at the state level. In the absence of such estimates at the district level and below, poverty amelioration programmes are being implemented irrespective of the magnitude of the problem. In order to get an idea about the magnitude of the problem in different districts there

TABLE 4.2
Monthly Per Capita Consumer Expenditure in Orissa & India (In Rs.)

N.S.S. Round Year	Orissa		India	
	Rural	Urban	Rural	Urban
28th (1973-74)	42.66	70.09	53.01	70.77
32nd (1977-78) (P)	52.47	86.99	68.89	96.15
38th (1983)	98.75	151.42	112.45	164.03

TABLE 4.3

Monthly Per Capita Expenditure on Some Selected Items (983)

(In Rs.)

Sl. No.	Items	Orissa		India	
		Rural	Urban	Rural	Urban
1.	Milk & Milk products	1.50	6.10	8.45	15.15
2.	Edible Oil	2.67	5.90	4.53	7.94
3.	Clothing	6.09	11.76	9.66	12.52

Source : N.S.S. Reports 231, 240, 311 & 319.

were ranks (Table 4.5) based on the average of selected indicators which reflect to a large extent the extent of economic backwardness and hence the poverty incidence. The indicators used for ranking are :

1. Per capita income from agriculture.
2. Percentage of area irrigated.
3. Farm productivity per hectare.
4. Cropping intensity.
5. Distribution of fertilizers.
6. Percentage of villages electrified.
7. Surface road per Sq. Km.
8. Post office per lakh population.
9. Proportion of workers in non-agri. sector.
10. Proportion of school going children.
11. Percentage of male literacy.
12. Percentage of female literacy.

13. Auxilliary nurses and midwives per lakh population.

14. No. of Hospital beds per lakh population.

4.10 The incidence of poverty through ranking follows the order of Koraput, Kalahandi, Keonjhar, Mayurbhanj, Dhenkanal, Bolangir, Phulbani, Balasore, Sundergarh, Ganjam, Sambalpur, Puri and Cuttack. But it may be pertinent to mention that even among the more developed districts like Sambalpur, Ganjam, Sundergarh, Balasore, etc. there are pockets of poverty stricken population particularly those areas which are inhabited by tribals. Comparison of ranking with SC and ST population shows that districts with SC and ST population constituting more than one-third of the total population of the district tend to be underdeveloped or economically backward except Sundergarh and Sambalpur districts which

TABLE 4.4

Percentage Expenditure on Food and Non-food Items

Year	Rural		Urban	
	Food	Non-food	Food	Non-food
1973-74	75.74	24.26	67.57	32.43
1977-78	71.41	28.59	66.02	33.98
1983	73.64	26.36	65.31	34.69

Source : NSS Reports 231, 240, 311 & 319.

TABLE 4.5
Ranking of the Districts by Average Index

District	Ranks of the Districts					% of Scheduled population
	1976-77	1980-81	1981-82	1982-83	1983-84	
Balasore	6	6*	6*	6*	6*	24.8
Bolangir	7	7	10	10	8	34.9
Cuttack	2*	1*	3*	2*	1*	20.8
Dhenkanal	9	8	8	9	9	28.0
Ganjam	1*	3*	4*	5*	4*	24.5
Kalahandi	12	12	12	12	12	47.1
Keonjhar	8	11	11	11	11	56.0
Koraput	13	13	13	13	13	69.3
Mayurbhanj	11	9	9	8	10	64.3
Phulbani	10	10	7	7	7	57.5
Puri	3*	2*	2*	3*	2*	16.4
Sambalpur	4*	4*	1*	1*	3*	42.6
Sundergarh	5	5*	5*	4*	5*	59.8
State	—	—	—	—	—	37.1

* Indicates district above the state's average

Source : i) Bureau of Economics and Statistics, Government of Orissa.
ii) Census of India, 1981.

may be due to certain pockets of prosperity i.e., Rourkela Steel Plant in Sundergarh and Hirakud dam in Sambalpur.

Inequality and Poverty

4.11 Poverty is inevitably the result of inequality in the distribution of wealth, income and opportunities in economic activities. Many programmes since independence were focussed in reducing inequality but such efforts have not yielded expected results.

4.12 Land is the basic unit of production for farming but its distribution is too skewed to favour larger holdings. As may be seen

from Table 4.6, while nearly three fourths of the holdings are small (<2ha) but the area operated is slightly more than one third (37.9%) of the total area operated in the state. On the other hand, holdings with 7-10 ha though constitute 7.2% of the total, the area operated is as high as 29.9%. Due to the division and fragmentation of the holding in the process of inheritance, smaller holdings are becoming increasingly non-viable.

4.13 The distribution of other assets more or less follow the same skewed trend. Although detailed information on the distribution of the total assets possessed by households of different economic/land holding group in the state is not available, some

TABLE 4.6

Distribution of Operational Holdings and Area Operated

(%)

Operational holding	1970-71		1976-77		1980-81	
	No.	Area	No.	Area	No.	Area
Up to 2 ha.	76.2	38.5	75.7	40.3	73.6	37.9
2-10 ha.	18.8	34.6	20.2	33.5	19.2	32.9
7-10 ha.	5.0	26.9	4.1	26.2	7.2	29.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source : Agricultural census 1970-71, 1976-77 & 1980-81.

of the ORG's studies throw light on this aspect. As may be noticed from the Table 4.7, the poorer categories like AL, MF and SF who form the major chunk of the rural households where poverty is rampant possess hardly 15% of the total household assets. The distribution is so uneven that in the most developed part of the state i.e., Mahanadi Command Area, while the assets owned by an AL family is reported to be Rs. 6,298 (including land) the same for a large farmer's

family is almost 28 times that of an AL family. Although empirical data is not available, field observations indicate that the women headed households generally reported very low capital formation which is quite obvious due to less economic opportunities available and the discrimination in wage payment to them.

Anti-poverty programmes

4.14 Poverty amelioration programmes can

TABLE 4.7

Distribution of Assets (value) by Land Holding Size

Land holding category (in ha)	Mahanadi area (1985)	Rengali area (1983)	Kalahandi district (1984)	Indravati area (1988)
Landless	2.2 (6.3)	0.7 (1.2)	2.5 (3.4)	3.5 (4.5)
Marginal (Up to 1.00)	—	5.9 (10.9)	—	5.6 (7.1)
Small (1.01 - 2.00)	9.8 (28.5)	15.2 (27.8)	15.6 (21.2)	12.6 (15.9)
Medium (2.01 - 4.00)	26.9 (78.5)	27.9 (51.0)	28.2 (38.2)	28.0 (35.5)
Large (4.01 +)	61.1 (178.5)	50.3 (92.0)	53.7 (72.8)	50.3 (63.6)
Total	100.0 (36.1)	100.0 (21.7)	100.0 (23.0)	100.0 (20.3)

(Figures in parentheses indicate average value of assets / H.H. in Rs. '000)

Source : ORG Surveys 1983, 1984, 1985 & 1988.

broadly be grouped into (i) asset endowment, (ii) wage employment, and (iii) training programmes. The first category includes IRDP, DWCRA, ERRP, etc., in rural areas while the counterpart programmes in urban areas include SEEUY, SEPUP, promotion of small industries, etc. These programmes aim at transfer of productive assets to the target families. Employment Generation Programmes are mostly implemented in rural areas. These include mainly NREP and RLEGP. The newly formulated Jawahar Rozgar Yojana combines these two with more resource allocations. The training programmes are TRYSEM and other programmes similar in nature.

Integrated Rural Development Programme (IRDP)

4.15 It is the largest programme aimed to remove rural poverty in the country. In Orissa it was introduced in 1978-79. The main objective of IRDP is to operationalize an integrated strategy for not only resource and income development of the vulnerable sections of the population but also to increase employment opportunities and production capabilities in different sectors of the rural economy.

4.16 IRDP guidelines demarcate its target group of the poor based on the household income with cut off point at Rs. 3,500 per annum in the Sixth Plan and subsequently raised to Rs. 6,400 in the Seventh Plan. In the case of those who own land, these limits are translated into land ownership viz. 1.00 ha. of irrigated land or 2.00 ha. of unirrigated land. A family to be covered under IRDP is eligible for financial assistance which provides an outright subsidy component of 25% to ST families. The remaining of the amount is available as loan from financial institutions.

4.17 Practically, any kind of economic activity can be taken up under IRDP, but a scheme has to be technically feasible and ensure generation of income sufficient to help the beneficiary move above poverty level on a lasting basis. Some of the economic schemes being promoted under IRDP in Orissa are minor irrigation like dug

wells, community irrigation like tubewells/river lift points, farm implements, dairy, poultry, plough animals, goat and sheep rearing, bee keeping, sericulture, fisheries, forestry, rural industries, artisanal works, small trade and business, service activities like transport, tailoring etc.

4.18 Since the inception of the programme till the year 1988-89, nearly 18.31 lakh families were assisted under different economic schemes (Table 4.8). But there are wide variations in the coverage of families in different districts (Table 4.9). Relatively more developed districts of Cuttack, Puri, Ganjam, Sambalpur, etc. have more coverage than the backward and poverty stricken districts like Koraput, Kalahandi, Mayurbhanj and Phulbani. While initially, emphasis was on the primary sector i.e., agriculture and allied activities, later on, the emphasis shifted to ISB (industries/services/business) sector (Table 4.10).

4.19 In the beginning there were reservations with regard to extending benefits to eligible women under IRDP. Until 1986-87 women beneficiaries accounted for only 2.7% of the total IRD beneficiaries. However, the coverage rose to 19.1% in 1987-88 and 25.5% in 1988-89 due to the renewed emphasis being given to women to improve their lot. The guidelines of IRDP recommend coverage of 30% women beneficiaries in IRDP.

4.20 Sector-wise coverage of women beneficiaries for three years i.e., 1985-86 to 1987-88 for which information is available is presented in Table 4.11. This table clearly brings out the large coverage of women beneficiaries under ISB (industries, services and business) sector. Women beneficiaries are particularly observed to have performed well in small businesses.

Economic Rehabilitation of Rural Poor (ERRP)

4.21 This is a programme sponsored by the State Government during the Sixth Plan as a supplementary to IRDP so as to cover, on an average, 10 poorest families in each village. According to ERRP guidelines the

TABLE 4.8

Yearwise Coverages of Beneficiaries in Different Programmes

Year	IRD	DWCRA	ERRP
80-81	100419	-	
81-82	138367	-	
82-83	252453	-	336314
83-84	217073	1818	
84-85	213119	8111	
85-86	173427	6911	66352
86-87	207872	9613	1,10,944
87-88	304732	14009	1,83,755
88-89	223462	3624	123628
Total	18,30,924	44086	8,20,993

Source : Dept. of Panchayatiraj, Govt. of Orissa

poorest families are those who have no assets and carry a very low credit worthiness and who eke their living through wage earn-

ings not exceeding Rs. 1,200/- per year. The programme is supposed to rehabilitate the poorest of the poor families. Schemes under

TABLE 4.9

District-wise Coverage of Beneficiaries under Different Programmes

District	IRD	DWCRA	ERRP
Balasore	134697	-	68031
Bolangir	106665	9740	45590
Cuttack	288552	-	128314
Dhenkanal	95404	8944	49151
Ganjam	197321	-	77597
Kalahandi	112464	11883	47817
Keonjhar	85685	-	32417
Koraput	184411	-	92391
Mayurbhanj	117690	-	56032
Phulbani	78344	-	33726
Puri	198262	-	81749
Sambalpur	148954	10181	71285
Sundergarh	82475	3338	36893
Total	1830924	44086	820993

Source : Dept. of Panchayatiraj, Govt. of Orissa

TABLE 4.10

Coverage of Families under IRDP According to Sector

(% of beneficiaries)

Sector	Year							
	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
Agriculture	17.5	16.3	13.4	14.3	13.8	12.7	8.7	7.3
Minor irrigation	28.0	33.5	27.7	22.1	22.4	9.8	3.4	7.2
Animal Husbandry	26.5	32.2	28.0	18.6	13.4	14.3	12.8	9.7
Fisheries	3.2	3.7	2.2	2.0	1.2	2.0	1.8	1.4
Industries/ business/ services	24.8	14.3	28.7	43.0	49.2	73.3	56.8	74.4
Total	100.0 (100.4)	100.0 (138.4)	100.0 (252.5)	100.0 (217.0)	100.0 (213.1)	100.0 (173.4)	100.0 (207.9)	100.0 (304.7)

(Figures in parentheses indicate number of beneficiaries in '000)

Source : Dept. of Panchayatiraj, Govt. of Orissa

this programme carry 100% subsidy for land based and fishery programmes while it is 75% for animal husbandry programmes. The other components and modus operandi of the programme are similar to that of IRDP.

4.22 Since 1980-81, when it was introduced, till 1988-89, nearly 8.21 lakh families were assisted under this programme, of which one-fifty are reported to be ST

beneficiaries. Thus, every year, on an average nearly 0.92 lakh beneficiaries were covered as against the target of 1.00 lakh. The pattern of coverage in different districts is almost the same as that of IRDP with relatively more developed districts getting more than their share.

4.23 Besides these, there are programmes with poverty amelioration objective like the

TABLE 4.11

Sector-wise Coverage of Women Beneficiaries under IRDP

Sector	1985-86	1986-87	1987-88
Agriculture	1.5	1.3	0.1
Minor Irrigation	1.5	0.9	0.1
Animal Husbandry	11.6	10.9	0.8
Fisheries	0.5	0.5	NA
Industries/Services/ Small business	84.9	86.4	99.0
Total	100.0 (8363)	100.0 (15021)	100.0 (58100)

(Figures in parentheses indicate no. of beneficiaries)

Source : Dept. of Panchayatiraj, Govt. of Orissa

NA : Not available

Massive Programme to assist small and marginal farmers for increasing agricultural production, Rehabilitation of Bonded labour, Artisan Development, Self Employment for Educated Unemployed Youth (SEEUY), Self Employment for Urban Poor (SEPUP) and area development programme like Drought Prone Area Programme (DPAP) etc. Under special component plans for SCs and STs, added emphasis is given to remove the economic backwardness of these poor and under privileged sections of society. For the economic upliftment of women, a special programme called DWCRA is being implemented in the state. Details about this programme are presented later on.

4.24 Evaluation studies on poverty alleviation programmes bring out certain bottlenecks. Some of the major constraints which need to be attended and tackled for smooth and effective implementation of the programmes are

1. Coverage of ineligible beneficiaries.
2. Selection of schemes not matching the skill and interest of the beneficiary.
3. Personal biases of government functionaries in the selection of beneficiaries and the schemes.
4. Political interference in programme implementation.
5. Reluctance on the part of financial institutions to extend assistance.
6. Tight repayment schedule.
7. Improper and hurried planning and indifferent implementation.
8. Inadequate marketing support particularly for ISB sector.
9. Programme more target-oriented than result/development oriented.
10. Scale of assistance inadequate to generate sufficient income.
11. Inadequate complementary linkages to support the scheme.
12. Monitoring of the schemes and appropriate follow up lacking in majority of the cases.

Employment programmes

4.25 Employment generation is the key strategy for poverty alleviation. National

employment programmes like NREP and RLEGP aim at providing employment in rural areas. Their objectives are :

- to generate gainful employment for the unemployed and underemployed;
- to create durable community assets for strengthening the rural infrastructure and
- to bring about improvement in the living standards and nutritional status of the poor.

4.26 The performance of these two programmes can be seen from Table 4.12. On an average, each year nearly 175.55 lakh mandays of employment in NREP and 149.65 lakh mandays in RLEGP were generated. If one considers 100 days of employment having been ensured to each beneficiary, number of unemployed/underemployed persons provided with work stand at 1.76 lakhs under NREP and 1.5 lakhs under RLEGP; taken together it works out to 3.26 lakhs. As against this, the projected unemployment in the state at the beginning of 1988-89 is 7.4 lakhs. Besides, nearly one third of the workers in the state are reported to be underemployed with each one of them seeking an average employment for more than four months in a year. Thus, the employment generation under NREP and RLEGP appears to have been too inadequate to meet the challenge of unemployment and underemployment particularly among the poorer sections.

4.27 Besides the inadequate employment generation, some of the constraints of the programme are :

- Delay in payment of wages
- Less preference of durable community assets
- Improper planning of the individual project
- Coverage of ineligible persons
- Improper timing of the programme operation
- Inadequate income generation for those covered under the programme due to less employment, etc.

Training programmes

4.28 The main objective of the specialized

TABLE 4.12

Employment Generation under NREP & RLEGP

(In lakh than days)

Year	Contribution by women labour (%)			
	NREP	RLEGP	NREP	RLEGP
1981-82	194.31	NA	—	—
1982-83	176.61	NA	—	—
1983-84	132.26	NA	NA	—
1984-85	158.37	73.22	NA	NA
1985-86	147.83	121.29	11.5	10.4
1986-87	181.77	175.94	16.0	15.8
1987-88	224.99	188.41	19.4	21.5
1988-89	188.26	189.40	20.3	NA
Total	1404.4	748.26	—	—
Average/year	175.55	149.65		

Source : Dept. of Panchayatiraj

NA : Not available.

training programmes is to settle the poorer population, particularly the youth, both in self-employment and wage earning in the secondary and tertiary sectors. In order to help the rural youth to take advantage of the potentialities of the local resources in supplementing the income of their families, a scheme 'Training of Youth for Self Employment' was started in 1979. Similarly for educated unemployed in smaller towns, a scheme was introduced in 1983 called 'Self Employment for Educated Unemployed Youth' (SEEUY) which envisages entrepreneurship training before they are assisted to take up some venture. In addition, there are other training programmes particularly under artisan development organized under Khadi Gramyodyog and other sectoral programmes like sericulture, handlooms etc. Significant impact is reported to have been made by these training programmes. However, for better performance, there is a need :

- to have a detailed survey regarding the possibilities of developing units under ISB sector in the area;

- to work out the details of the programme taking into account the trend in the growth of the ISB sector and changes in the pattern of employment;
- to make training programmes more practical and conducive to take up self-employment avocation;
- to rehabilitate the trained beneficiaries by covering them under suitable self-employment programmes;
- to make available liberal institutional finance;
- to continue technical guidance and follow up services; and
- to provide market support.

Concluding observations

4.29 There is a strong school of thought which does not favour continuance, let alone, expansion of the anti-poverty programmes. To them, it is distribution of poverty and that too in an inefficient manner which results in wasteful expenditure and spread of corrupt practices. If past experience is any guide, mere increase in total wealth does not necessarily ensure equitable

sharing of benefits by the have-nots. According to the estimates of Living Standard Improvement Study Project under the distribution system operating in the country, hardly half of the economic growth reaches the poor. In other words, if the rate of economic growth in the country is 7% per annum, the income of the poor would increase by only 3.5% per annum. At this rate a poorest of the poor family (with an annual income less than Rs. 3,500) would take nearly 23-24 years to come above the poverty level (of Rs. 6,400) unless certain direct interventions are made to help it to improve its standard of living. As indicated earlier these interventions may be in terms of improving the nutritional status, income level and employment opportunities. Depending upon the resource base, income level and skill availability within the family, these inter-

ventions may have to be advocated either individually or in combination. For example : if a family's income is Rs. 2,500/- it needs assistance to generate an additional income of Rs. 3,900. At an incremental-capital-output ratio (ICOR) of 2.7 (as assumed by the seventh plan) the level of investment required would be around Rs. 10,530. The question is whether a family with such a low level of income could absorb and be able to manage this huge level of investment particularly in view of the poor resource base and lack of skill. For such families a direct attack on poverty through resource endowment may not help in bringing desirable changes. Instead a combination of different poverty amelioration measures could be advocated. Depending on the poverty level, the types of interventions needed are indicated :

Poverty groups	Income slab (Rs)	Type of interventions required
Destitute	2265	Mostly social security like old age pensions, rehabilitation of handicapped persons etc.
Very very poor	2266-3500	Employment Guarantee Schemes and Resource Endowment/Self employment schemes
Very poor	3500-5000	Mostly resource endowment/self employment schemes
Poor	5000 & above	The general growth of the economy will take care of this group and therefore no intervention is required.

CHAPTER V

The Unborn and the New Born Child

A profile

The backdrop

5.1 Orissa has a child population of about 10 million, 89% of whom live in rural areas. Over 20% belong to the ST and 15% to the SC. The infant mortality rate (IMR) in Orissa is around 130 per 1000 live births. Half the infant deaths occur within the first month of life – tetanus being the major killer of these neo-natal deaths. The neo-natal tetanus rate is higher in rural areas (10.8 per 1000 live births) than in the urban areas (2.5).

Life before birth

5.2 The above indicators bring out the general status of infant health but the high incidence of mortality among children is mainly due to the factors affecting the foetus before birth. The health status of the mother-to-be with inadequate intake of nutritious food and lack of antenatal care is largely responsible for the birth of under-weight children (birth weight less than 2500 gms) who are more susceptible to infection and diseases. Insufficient awareness about health and health related matters contribute significantly to the prevailing unsatisfactory state of infant health. Thus solutions to the problem of health have to be sought through not only the conventional health sector programmes, but also beyond them in the

attitudes, practices and convention followed by different strata of society.

5.3 There are no state level indicators to show the status of maternal health especially of women in child-bearing age. However there is need to build up an information base on this aspect which would be helpful in modifying/rectifying certain measures, if any, to make the programmes more effective. In the absence of such data, localised surveys undertaken by various institutions in the rural and urban areas of the state are being relied upon to describe the prevailing situation with regard to factors affecting life before birth.

5.4 In a baseline study conducted in five project districts of the Area Development Programme (ADP) in Orissa, it was found that the proportion of women currently pregnant was maximum in the age group of 20-24 (Table 5.1). There was an equally large proportion of pregnant women in the lower age group of 15-19. This was reportedly higher in the rural areas (16.5%) than the urban areas (12.7%). Similarly there were even older women of 35+ currently pregnant. This trend reveals that majority of women bear children when they are too young. They constitute potential 'at risk' women, who have a high probability of pregnancy complications. Further among the

TABLE 5.1
Pregnant Women by Age Groups

Age Group	Stratum I*	Stratum II**	Urban	Project Area
15-19	16.9	15.1	12.7	15.2
20-24	16.9	15.6	15.1	15.7
25-29	12.4	9.1	13.1	10.5
30-34	8.0	7.8	6.2	7.5
35-39	3.5	4.6	3.9	4.2
40-44	1.0	1.5	1.3	1.4
15-44	10.1	9.2	9.1	9.4
All pregnant women	84	231	71	386
All women (15-44)	830	2498	777	4105

Source : Baseline survey on fertility, mortality and related factors in Orissa.

* Stratum I refers to villages provided with health centres or subcentres.

** Stratum II refers to villages without any health facility.

pregnant women majority (43.9%) reported to be in the third trimester. No woman in the entire project area reported pregnancy in the first month. Even the women in the first trimester were few (16.1%) compared to all stages of pregnancy. This only reveals under reporting of pregnancy at early stages arising out of (1) shyness, (2) ignorance, (3) superstition and (4) indifference to associated health problems. Further enquiry about the number of surviving children revealed that a fourth of the currently pregnant women had three or more living

children and were awaiting the fourth or subsequent order of birth. In a NISWASS study (1982) of four districts of Orissa covering 1291 households, 259 women who had at least two children had each a baby during the past year. The spacing of births for these women is presented in Table 5.2.

5.5 The broad findings of the baseline survey on utilization of MCH services are worth reporting. The availability of MCH services appear to have little impact on the women registering at ANC. The proportion of women registered at ANC is marginally

TABLE 5.2
Birth Spacing Between Last Two Children

(% of women having at least 2 children)

Birth interval	Puri	Sundergarh	Mayurbhanj	Kalahandi
1 year	21	13	21	29
2 years	34	40	41	39
3 years	28	30	25	19
More than 3 years	17	17	13	13

Source : NISWASS - Children in Orissa.

higher (15.5%) in villages with some health facility as compared to villages having no facility (13.99%). However the provision of health sub-centre/PHC in a village does not necessarily result in better ANC performance. In urban areas the ante-natal cases registered were highest at 38%. Thus a strong rural-urban differential exists in so far as care of pregnant women is concerned. The underlying prejudicial customs and apathetic attitudes towards registration and medical check-ups are rampant in rural areas which can change only with education.

5.6 The major reasons for non-registration were lack of necessity perceived by them and the monetary expenses that would have to be incurred in the process. A large number of women either did not know the system of ante-natal check-up or did not think that it was customary in the community to go for such check-ups. Thus it is the interplay of both the lack of knowledge of social inhibitions which keep women away from MCH services besides the economic pressure.

5.7 An important component of MCH is the place of birth and the type of attendance at birth. These two factors directly affect infant health and mortality. Thus one can broadly conclude that majority of women in the rural areas, SC/ST women and the women from lower economic strata remain by and large outside the ambit of MCH programme. A review of ADP six years later by ORG also revealed more or less the same picture, thereby pointing out the need for making concerted efforts on the educational front to make women aware of the MCH facilities available in the area and the advantages in availing the same.

5.8 In the registration of ante-natal cases also, strong rural-urban differentials were observed. Since, in the urban areas, there is likely to be a greater awareness among women to undergo ante-natal check-up and the medical facilities are also more easily accessible, the percentage receiving ante-natal care is higher. There was a general apathy among currently pregnant women and those who had recently given birth (within last 5 years) towards utilization of the maternal and child health (MCH) service ac-

cording to the ADP report. The general indifference to MCH services coupled with low household income levels resulted in a large proportion of deliveries taking place at home. The percentage of domiciliary deliveries was disproportionately large (88%) with only 12% reporting delivery in institutions (Baseline report of ADP in Orissa). The situation is relatively better in urban areas with 38% of deliveries taking place in institutions as against 9% in rural areas (Table 5.3). Further only 13% of the home

TABLE 5.3
Place of Delivery (June 1980 to May 1982)

District/ Zone	Place of delivery	
	Home	Institution
1. Cuttack	89.4	10.6
2. Ganjam	86.3	13.7
3. Kalahandi	97.5	2.6
4. Phulbani	96.6	3.4
5. Puri	79.3	21.7
Stratum I	86.5	13.6
Stratum II	92.0	8.0
Rural	91.0	9.0
Urban	62.4	37.6
All project Areas	87.7	12.2

Source : Baseline survey on fertility, mortality and related factors in Orissa.

deliveries were attended by medical/paramedical personnel and a large percentage (59%) of home deliveries were attended by untrained persons such as relatives, friends or neighbours (Table 5.4). Similar observations were also recorded by Social Inputs for Area Development (SIAD) study in Phulbani. Less than 1% of deliveries in the sample had taken place at PHC or sub-centre and only 16% of the births were

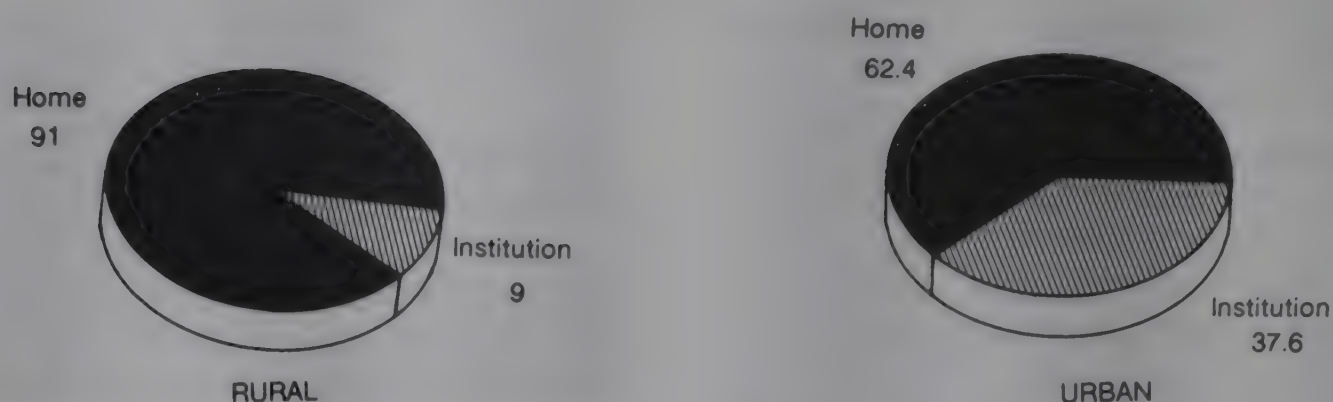
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Koramangla

Bangalore-560034

Place of Delivery (June 1980 to May 1982)



assisted by qualified birth attendants. Thus there is a general lack of awareness particularly in rural areas with regard to usefulness of MCH services.

Life after birth

5.9 Malnutrition : The poor state of maternal health and undernourishment contributes in large measure to the high degree of infant malnutrition ultimately leading to morbidity and mortality of the new born child. Undernourishment is normally related with the quantity of food intake while malnourishment is related to its quality. Undernourishment and/or malnutrition is recognised as one of the underlying causes of ill health particularly among the children in the country.

The nutritional status of tribal children is much worse though not fully documented so far for the state. The few research studies which are available on nutritional status of tribal children are not comparable in terms of conceptual framework, data analysis and presentation of a comprehensive picture. In-

dividual studies of different methodology and precision reveal that protein energy malnutrition is the most glaring problem in tribal areas. Some reports indicate that xerophthalmia and anaemia are the other two problems. The extremely high incidence of parasitism, malaria and a very low intake of green leafy vegetables in some isolated tribal pockets also indicate the possibility of widespread nutritional anaemia in these regions.

Some anthropological studies have also attempted to analyse and establish the fact that nutrition is one of the acute problems of the tribals, particularly in areas where population has shifted due to the development projects or where the ecological balance is disturbed. The climatic and ecological changes resulting from deforestation have led to increased frequency of prolonged droughts. Such, for example, are the cases of Phulbani and Kalahandi districts of Orissa. A study of health and nutrition among Pauri Bhuinyas of Orissa has indicated that the diet of these tribal groups was

TABLE 5.4

Attendance during Birth (June 1980 to May 1982)

	Stratum		Rural	Urban	All project area
	I	II			
Trained Dai	21.2	10.1	31.2	25.2	13.0
Untrained Dai	24.2	28.6	27.8	31.2	28.1
Relatives/ Friends	54.6	61.4	60.2	43.6	58.9

Source : Baseline survey on fertility, mortality & related indicators in Orissa.

deficient in both quality and quantity and even the basic calorie requirements were not met. Almost similar findings have been observed among the Khondhs and Lanjia Saoras of Orissa.

Case study of Pauri Bhuinyas

The village Jaldih lies about 8 Kms, from Koira, in the hilly areas of Bonai sub-division of Sundergarh district. The village is completely isolated and is inaccessible by any means of transportation. Thickly wooded hills of Malayagiri mountain range have separated this village from Koira, the nearest urban market centre. Unless a person has a strong determination to cover the four hour journey uphill through dense forest on foot, it is not possible to visit this village. This geographical barrier is a disincentive to the doctors and local officers in making visits to this village and keeping contact with the people.

It was found that the incidence of malnutrition here was very high, especially amongst children and infants. 14.4 per cent of the total population surveyed were malnourished children with typical clinical signs (frank nutritional deficiency) in the age group of 0 to 14 years. Nutritional anaemia due to iron, folic acid or B12 deficiency was most common among women of child bear-

ing age. Nutritional deficiency was detected in 5.1 percentage of women in the age group of 24 to 44 years while no male case was detected in the same age group.

Food and seasonal variation

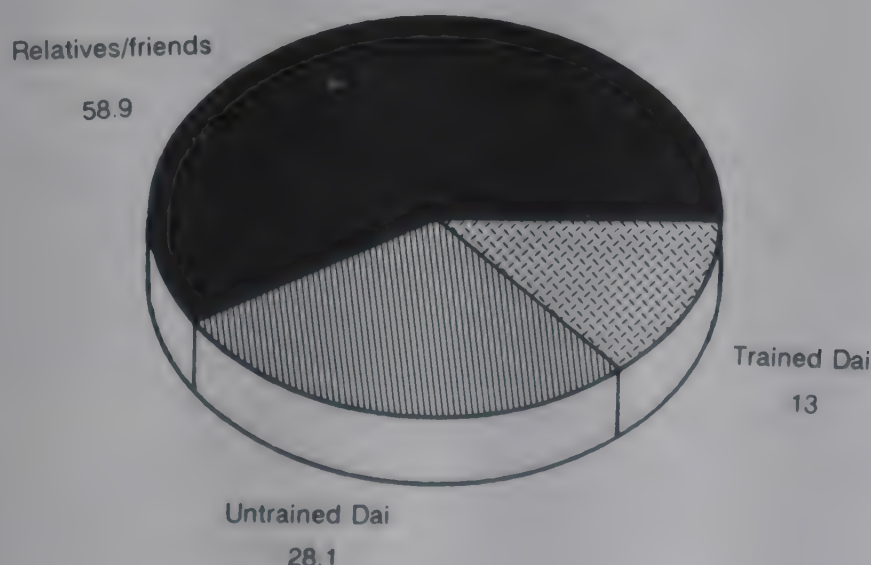
Rice was esteemed as the ideal food by the Hill Bhuinyas. Even meat and millet did not constitute a hearty meal without rice. The amount of rice which Bhuinyas got from their lands was not sufficient for the whole year. Therefore, they subsisted on minor millets and fruits like jackfruit and mango in seasons. The Hill Bhuinyas had a varied diet, since it varies with seasonal availability of food.

Edible roots, tubers, flowers, vegetable, mushrooms and fruits which were collected from the forest supplemented their food to a great extent, especially during the lean months from July to October. Hunting and fishing were viewed more as sport than as a source of food. Wild animals were hunted occasionally in the adjoining reserve forest, while fishing was restricted to streams.

Nutrient intake

The nutrient composition of an average Hill Bhuinya diet showed calorie and protein deficiency of 18.7 per cent and 47 per cent respectively. Besides calories and proteins,

Attendance During Birth



other minerals and vitamins were also lacking in the diet of these tribals. Alcoholic beverages, consumed frequently, were however not included in the analysis of the composition of the diet.

Feeding of the infants

Infants were usually suckled by their mothers till the next pregnancy was ascertained. Usually breast-feeding lasted up to the age of two to three years and in some exceptional cases up to four and a half years. A four year old Hill Bhuinya boy had still not been weaned, although he was eating rice. The reasons for not discontinuing breast-feeding was not investigated in detail. Supplementary feeding started generally with semi-liquid foods like gruel made of minor millets. The infants were gradually introduced to family foods. Usually there was a phase in the weaning period, when infants were taking semi-liquid infant foods as well as normal family food.

The survey revealed that the diet of the majority of households was both qualitatively and quantitatively deficit. Morbidity pattern of a community depends mostly upon its nutritional status and on intake of food. The survey in the Bhuinya village showed a high incidence of diseases caused by nutritional deficiency. However, it was very difficult to ascertain and confirm clinically the cases of protein-calorie malnutrition which was a rule rather than an exception. In addition to PCM, the population surveyed showed physical signs of deficiency of one or more nutrients to a varying degree with the clinical manifestations.

Like any other tribal village, the mobility, choice and even thinking of Hill Bhuinyas was largely governed by the social rules prevalent in the village. With their own customary analysis of various contents of food, the Bhuinyas prescribed what should be given to expectant, nursing mothers, infants and children. Very often traditions coupled with their irrational thinking deprived the Bhuinyas from taking food stuff with high nutritional value, e.g. cows are never milked, hence milk was not consumed by the Bhuinyas. In the recent past, contact with

non-tribals has affected the customs of Bhuinya Society. For instance, importance of food problems, hygiene and restrictions on food were slowly being imposed. The Hill Bhuinyas have given up eating pork and beef ever since they have come in contact with the Hindus.

5.10 Infant Feeding Practices : Breast feeding is generally practiced by a majority of mothers in rural Orissa. The first milk or colostrum is discarded among all the communities on superstitious grounds. Usually breast-feeding continues till the next child is born. The variation in the duration of breast-feeding is very closely associated with the income of the family and its social status. The study conducted by the State Nutrition Division 1980 reveals that in Kalahandi, Sundergarh, Ganjam, Dhenkanal and Sambalpur districts, mothers in 27.8% families started breast-feeding six hours after birth, whereas 38.8% of them started breast-feeding after one day of the child birth (Table 5.5). The neo-nates are fed after two days in case of 30.9% of the families. Only 2.5% of the families report feeding their babies with breast milk after three days. As regards duration, in case of 2.1% of the families breast-feeding continued up to 1 year whereas 27.3% of the families continued for 2 years (Table 5.6). A majority of the mothers (49.8%) continued breast-feeding for 3 years whereas 20.8% of them reported the practice till the birth of the next child.

The reasons for discontinuing breast milk were insufficient milk and the need for the mother to go out for work. In very rare cases do mothers resort to bottle feeding using powdered milk or cow's milk. There are no special weaning foods given to the child in Orissa. When breast milk is considered no longer sufficient they give the child rice water which adults generally take for breakfast. The practice is started after the child is one year old.

A contributing factor to infant malnutrition is prolonged breast-feeding without appropriate and timely introduction of complementary feeding. Too early an introduction of weaning food involves the risk of infection and adverse affect on lacta-

TABLE 5.5
Breast-Feeding Practices

Districts/ place	Total No. of Household surveyed	Time interval before starting breast-feeding			
		6 hrs.	1 day	2 days	3 days
Sambalpur	312	30	125	141	16
Dhenkanal	264	27	93	138	6
Ganjam	264	84	115	52	12
Sundergarh	252	29	135	88	—
Kalahandi	264	208	56	—	—
Total	1356	378 27.8%	524 38.8%	419 30.9%	34 2.5%

Source : State Nutrition Division.

tion. Too late an introduction would be harmful to the infant's growth and development arising from insufficient quantity of breast milk. The ideal way would be to introduce complementary feeding between breast-feeding, it must be easily prepared and be adoptable to the regular family diet. This highlights the need for an educational programme for promoting the concept of weaning foods.

In a survey (1987) conducted in the five project districts of ADP in Orissa, it was found that the average age for starting supplementary food was 10 months. There were significant inter-district variations. Phulbani district reported the highest average age of weaning foods (12 months) while Puri district recorded the lowest age. The higher age for introducing supplementary food in Phulbani could be because of the practice of

TABLE 5.6
Duration of Breast-Feeding

District/ Place	Total No. of Household surveyed	Duration of breast-feeding (years)			
		1	2	3	Till next issue
Sambalpur	312	—	142	170	—
Dhenkanal	264	5	77	108	74
Ganjam	264	9	53	106	96
Sundergarh	252	14	82	93	63
Kalahandi	264	—	16	198	50
Total	1356	28 2.1%	370 27.3%	675 49.8%	283 20.8%

Source : State Nutrition Division, Bhubaneswar.

prolonged breast-feeding prevailing among the scheduled tribes. Again babies in rural areas are given supplementary food much later (10 months) than their counterparts in urban areas (8 months). The usual dietary practices of adults in most parts of Orissa consist of rice and vegetable curry at mid-day and in the evening starting with rice gruel in the morning. The curry usually contains potatoes and a mixture of other vegetables. Very small quantities of oils (5-10 gms per capita/day) are used in preparation of the curry. Sugary tea, a useful source of energy in other parts of India, is not a common beverage in rural Orissa. On account of this the calorie and protein intake per capita per day are much lower than the standard norm as recommended by the ICMR (Table 5.7). A survey undertaken by the National Nutrition Monitoring Bureau in 1979 examined food consumed by a sample of 340 people in Orissa. Among them, 36% were found to fall short of normal energy requirement. Of the 44 children aged between 1-4 years, 61% were found to fall short of normal energy requirement. Of the 44 children aged between 1-4 years, 61% were found to have inadequate protein intake too. However isolated protein deficiency was not found at all. On a comparison of the recom-

mended quantity and the actual intake, it is found that in almost all the districts there is serious deficiency of calorie and protein intake. The dietary status of tribals is also compared with the ICMR diet as derived from a case study done on Pauri Bhuinyas in Orissa (Table 5.8).

Infant morbidity and mortality

5.11 The unfavourable factors affecting life before birth and the environment in which the baby grows characterized by poor quality and quantity of food and insufficient intake of proteins and calories affect the growth of children making them susceptible to frequent attacks of sickness and infections. The major diseases affecting the children are diarrhoea and respiratory infections. The findings of a study conducted by the Population Research Centre, Utkal University in 1984 in a slum area in Bhubaneswar reveal that 25% of slum children suffered from respiratory diseases, 18% from diarrhoea, 22% from skin diseases, 10% from measles, 20% from polio and 21% from rheumatic pain. This study also indicates that the children in large families are the risk groups and are frequently affected by various diseases.

TABLE 5.7
Calorie-Protein Intake — Actual Vs. Recommended

District	ICMR recommended quantity		Actual intake		Excess/ deficiency	
	Calorie	Protein	Calorie	Protein	Calorie	Protein
	Kcal	gm	Kcal	gm	Kcal	gm
Ganjam	2550	70.00	2071	44.50	- 479	- 25.50
Kalahandi	2550	70.00	2036	37.00	- 514	- 33.00
Sundergarh	2550	70.00	2123	37.00	- 427	- 33.00
Dhenkanal	2550	70.00	1994	35.00	- 551	- 35.00
Sambalpur	2550	70.00	1662	56.00	+ 112	- 14.00

1. State Nutrition Division, Bhubaneswar.

2. The Nutritive Value of Indian food and planning of satisfactory diets — Aykroyd.

TABLE 5.8

Composition of the Average Diet of Pauri Bhuinya Compared with the Indian Council of Medical Research (ICMR) Recommended Diet

Sl. No.	Constituents (Nutrients)	* I.C.M.R. recommended quantity	Average intake of an adult Pauri Bhuinya	Deficiency	Percentage
1	2	3	4	5	6
1.	Protein	70 gm	37.14 gm	32.86 gm	47.04
2.	Fat	50 gm	8.82 gm	41.18 gm	82.36
3.	Carbohydrate	440 gm	276.41 gm	163.59 gm	37.18
4.	Calories	2,550 K.cal	1,312.69 K.cal	1187.31 K.cal	18.7
5.	Calcium	0.8 gm	0.651 gm	0.149 gm	18.7
6.	Phosphorous	1.4 gm	1.142 gm	0.258 gm	18.43
7.	Iron	40 mg	27.7 mg	12.3 mg	30.75
8.	Vit. 'A'	7,300 IU	2,106.66 IU	5,139.34 IU	81.14
9.	Vit. 'B ₁ '	1.8 mg	0.64 mg	1.16 mg	64.55
10.	Vit. 'C'	200 mg	22.77 mg	177.23 mg	88.62

* Aykroyd - The Nutritive value of Indian food and planning of satisfactory diets.

The infant mortality in tribal areas also follows a similar pattern with diarrhoea, respiratory infection, tetanus etc. as major childhood killers. In a study on infant mortality in relation to fertility, 10 risk factors of IMR of tribal Orissa were identified. These factors in order of importance are :-

- i) Inadequate supplementary feeding
- ii) Lack of Immunization
- iii) Lack of participation In women's association
- iv) Unsafe drinking water
- v) Low Income
- vi) Colostrum not given
- vii) Low birth weight
- viii) Labour complication
- ix) Inadequate dietary intake of mother
- x) Poor health of mother.

Immunization

5.12 An important preventive measure to avert childhood death and disability is immunization against six major communicable diseases. The Government of India started with the Expanded Programme of Immunization (E.P.I.) in 1978 with the objective of reducing the morbidity and mortality due to diphtheria, pertussis, tetanus, polio, T.B. and typhoid. Since the progress with respect to this programmes was slow, the Government of India launched the Universal Immunization Programme (UIP) in 1985 with the specific objective of covering at least 85% infants against BCG, OPV and measles and 100% pregnant women against T.T. The entire state is covered under UIP. Under the programme the Central Government assists the State Government in the supply of vaccines, Cold Chain equipment and training of health personnel.

The coverage under immunization has definitely been up since 1987-88. While cent per cent coverage of target beneficiaries was reported in case of DPT, polio and BCG the progress with regard to T.T. for pregnant women was around 80% (Table 5.9). Comparing the achievement between 1987-88 and 1988-89, it may be observed from Table 5.9 that except BCG where there has been a shortfall in the achievement, in all other cases, the rate of achievement is quite significant. The UIP Programme provides for a Cold Chain Officer at the state level, while at the district level there is an Immunization Officer, a Statistical Officer and a Refrigerator Mechanic for all the 13 districts of the state. Till 1990, 1020 medical officers and 8218 paramedical staff were trained in this activity. However, no evaluation was carried out to know the effectiveness of the training and the impact on the beneficiaries, excepting some case studies.

For example, in an ICMR sponsored study (1988) in two districts of Orissa (Cuttack and Dhenkanal) on the immunization coverage and the people's attitudes, it was revealed that there was a large discrepancy between the records maintained by the clinic staff and

those mentioned by the mothers. For instance, in Cuttack (which is a UIP district) mother's statement indicated a coverage of 57% with regard to DPT/Polio while the card and PHC record showed an entry of 23% and 13% respectively. The major reasons for such discrepancies are considered to be

- i) inadequate supply of cards
- ii) improper maintenance of records
- iii) vacancy in posts
- iv) lack of supportive supervision.

The survey of the knowledge, attitude and practices with regard to immunization revealed a poor knowledge of mothers regarding diseases preventable from immunization. As many as 45% of mothers in Cuttack and 70% in Dhenkanal (Pre UIP phase) expressed ignorance of the same. The correct responses were usually associated with polio and tetanus. The knowledge of correct doses and time interval between doses was found fairly good (50% of respondents) in Cuttack. This is possible on account of actual immunization performed on their children. Generally the benefits of immunization were better understood by the educated mothers. Immuniza-

TABLE 5.9
Coverage under Immunization

Immunization item	Target in '000 (1988-89)	Achievement in '000 (1988-89)	% Achievement	Achievement in '000	% Achievement variation 87-88 & 88-89
T T(P.W.)	855	698	82	566	+23
D.P.T.	650	684	105	622	+10
Polio	650	685	105	551	+24
B.C.G.	650	648	100	676	-4
Measles	611	431	70	318	+35
D.T.	661	647	98	426	+52
T T (10 yrs)	351	337	96	247	+36
T T (16 yrs)	125	157	125	117	+33

Source : Directorate of Health Services, Orissa.

tion was higher in the mass camps than in PHC/Sub-centres. However the dropout cases are also higher here unlike in the clinics. This is mainly because the mass camps are more accessible to the target group than a PHC/Sub-centre. However, the camps are always organized in the same villages repeatedly. Hence the drop-outs increase. Those who did not immunize their children mentioned 'lack of information' and 'obstacles' as the major reasons for non-immunization or incomplete immunization. The suggestions offered to overcome these

problems are strengthening the health delivery systems and strict monitoring of records if the programme of universal immunization is to make a critical intervention in the lives of the children. While universal coverage has been achieved for limited population groups, moving to full natural scale would involve new institutional mechanisms, complementary channels, alternative approaches, higher management skills, additional technological and budgetary support and above all, community involvement.

CHAPTER VI

The Growing Child

Early childhood

6.1 The first few years of a child are crucial for its all round development. As the child grows, the physical requirements too grow and create a demand for a multitude of services in terms of nutrition, health education etc. The present chapter aims at highlighting these factors in relation to the growing child.

Nutrition status

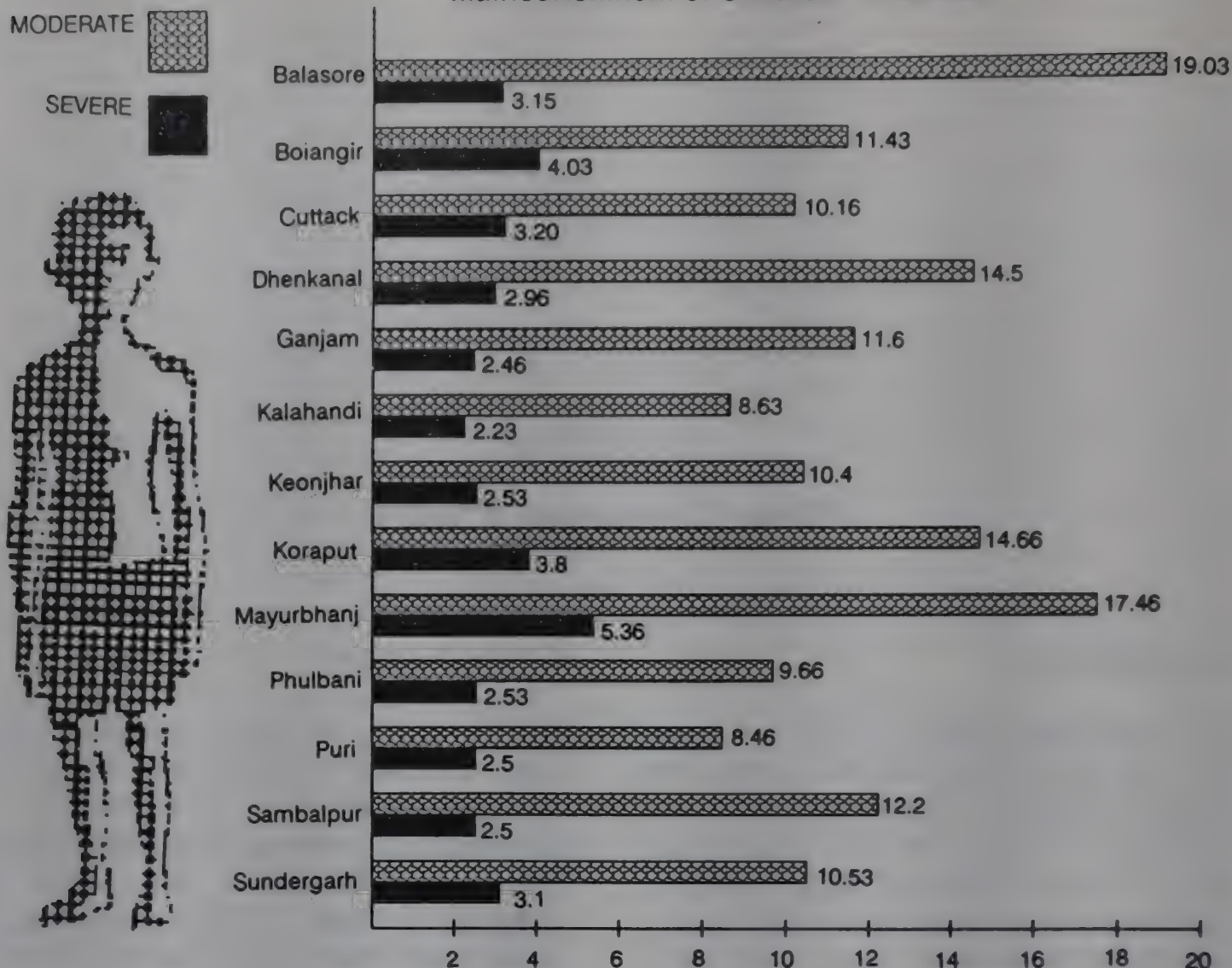
6.2 According to official estimates (DHS, Govt. of Orissa) of the children reported to be malnourished, 12.2% are moderately malnourished and 3.12% severely malnourished. From the district-wise information as presented in Table 6.1 Mayurbhanj has the highest proportion of malnourished children

TABLE 6.1
Malnourishment of Children in Orissa

Sl. No.	Name of District	%age of moderately malnourished children	%age of severely malnourished children
1.	Balasore	19.03	3.15
2.	Bolangir	11.43	4.03
3.	Cuttack	10.16	3.20
4.	Dhenkanal	14.5	2.96
5.	Ganjam	11.6	2.46
6.	Kalahandi	8.63	2.23
7.	Keonjhar	10.4	2.53
8.	Koraput	14.66	3.8
9.	Mayurbhanj	17.46	5.36
10.	Phulbani	9.66	2.53
11.	Puri	8.46	2.5
12.	Sambalpur	12.2	2.5
13.	Sundergarh	10.53	3.1
Total		12.20	3.1

Source : Directorate of Health Services, Govt. of Orissa, 1988.

Malnourishment of Children in Orissa



followed by Balasore, Koraput, Dhenkanal etc. Incidentally, these districts are backward and have pockets of tribal concentration.

6.3 Among the children of fishermen of Puri, the prevalence of malnutrition was as high as 14.6% in 1986. Anthropometric measurements of children aged 1-5 years using Gomez classification revealed 36% as moderately malnourished and 12% as severely malnourished (NNMB Survey in Orissa)¹. In country-wise surveys of the ICDS Project areas, the nutritional grades of children 0-6 years were ascertained at two time points viz. 1979-1980 and 1985-1986. The results of these surveys revealed that in 1979-80, the percentage of children found to be normal in Orissa was about the same

(30%) as that for the country as a whole. But by 1985-86, the improvement in the nutritional standard was found to be lower in Orissa as compared to the all India situation. The comparative figures for percentages of children found to be normal were 37.8% for Orissa as against 44.6% at the national level. During this six year period, the nutritional grades of children appear to have improved as there are significant increases in the proportion of children in higher grades of nutrition.

6.4 A study by National Nutrition Monitoring Bureau (NNMB) noted that under nutrition is widely prevalent among pre-school age children belonging to low income groups. According to the report, among eight states covered, Orissa was the second

¹ According to Gomez classification, moderate malnutrition is defined as having a weight between 74% and 60% of the reference weight for age and severe malnutrition as having a weight less than 60% of the reference weight for age.

highest with the severely malnourished (8.6%) children and with only about 12% reported to be well nourished. In 1982, 54.4% of households had calorie inadequacy while 45% reported protein inadequacy. The situation in urban slums is even worse with 25% of households meeting neither calorie nor protein requirements resulting in over 54% of the households being inadequate in calorie consumption (NNMB reports). Surveys by NIN in the past two decades indicate that the energy intake of rural low income group children is grossly inadequate. About 85% of children below 5 years in India suffer from varying degrees of malnutrition.

Micro-nutrient deficiencies

6.5 The problem of malnutrition is not restricted only to major nutritional deficiencies or calories, protein and energy. The balanced diet comprises of other essential nutrients like Iron, Iodine, Vitamin A, calcium

etc. which basically serve as protective foods. In the absence of these micro-nutrients, visible symptoms of night blindness, surra or beri-beri may manifest in the body. The root cause of micro-nutrient deficiencies stems from the poverty syndrome (which also causes calorie deficiency) but its impact on the human body could be of varying severity. Most diet surveys assessing overall household consumption, do not reflect the intra-household differentials, focussing on intake of women (pregnant and nursing) and children. It is generally observed that in the poorest families, the distribution of balanced food disfavours children while the overall calorie intake of households are seemingly adequate. For children, the predominantly cereal based diets are often insufficient. The type of food taken by children up to six years of age in Orissa is presented in Table 6.3.

6.6 Further, the NNMB's reports on prevalence of deficiency signs among pre-

TABLE 6.2

% Distribution of Children According to Food Intake by Age & Sex, 1978, (Rural)

Items	Sex	Present Age (years)						
		Below 1	1	2	3	4	5	6
1	2	3	4	5	6	7	8	9
Milk	M	68.2	46.8	32.5	25.7	21.5	19.7	19.9
	F	68.5	48.3	30.6	24.0	22.6	18.1	21.1
Wheat	M	6.3	22.7	27.0	30.2	30.9	34.8	33.8
	F	6.1	20.1	25.8	29.0	30.3	34.4	33.3
Rice	M	23.1	90.3	92.2	95.4	99.4	98.4	95.2
	F	23.2	89.5	92.1	96.2	90.6	98.3	98.8
Millets	M	21.5	27.5	19.8	17.9	15.6	16.8	17.3
	F	22.6	21.6	22.0	16.8	18.1	12.6	19.7
Meat Products	M	0.5	9.6	14.0	16.8	19.3	19.5	28.3
	F	0.4	9.8	14.1	17.2	20.5	19.7	28.4
Others	M	70.1	59.9	50.2	47.1	46.5	47.0	45.6
	F	72.8	65.6	60.3	43.8	43.4	46.8	41.2

TABLE 6.3

% Distribution of Children According to Food Intake by Age & Sex, 1978, (Urban)

Items	Sex	Present Age (years)						
		Below 1	1	2	3	4	5	6
1	2	3	4	5	6	7	8	9
Milk	M	99.3	77.9	51.0	40.9	36.7	33.1	21.8
	F	101.5	77.1	52.0	42.4	34.0	33.2	20.6
Wheat	M	4.9	38.2	47.9	50.3	54.9	52.5	53.0
	F	7.2	32.9	45.1	52.8	52.7	53.7	51.2
Rice	M	18.1	71.5	93.9	95.6	96.1	95.1	90.5
	F	16.4	71.4	99.7	93.1	92.6	93.6	98.9
Millets	M	14.0	14.2	14.3	9.6	9.3	7.5	13.0
	F	12.1	15.7	14.1	10.2	10.0	6.7	12.3
Meat Products	M	3.3	18.2	24.9	23.5	28.8	28.9	29.7
	F	2.4	15.4	23.0	30.5	25.9	99.5	28.1
Others	M	67.1	72.0	63.0	58.8	61.2	61.6	51.0
	F	62.2	69.9	57.2	62.3	55.4	59.0	51.8

Source : SRS, 1978.

school children and school goers for Orissa show marked differences. The prevalence of xerosis was 9.8% among pre-school children which decreased to 8.6% among 5-12 year olds. Bitot's spot cases show an increasing incidence from 0.8% among pre-school children to 1.9% among the older children (Table 6.4). The deficiency of Vitamin B causing angular stomatitis and other problems have more than doubled between the two groups of children. This is also true of caries. In fact, among the 8 states for which data was pooled on nutritional deficiency symptoms, Orissa ranks first in the prevalence rate of all the diseases (Table 6.4). This highlights the need for strengthening the nutritional standards of diets of the people.

- 1) Undertaking an intensive education programme for mothers;
- 2) Training of health and ICDS function-

aries on the micro-nutrient deficiency syndromes;

- 3) Promote the use of locally available food rich in Vitamin A and B; and
- 4) Helping health agencies in monitoring the growth of children.

Health situation

6.7 Health is of crucial importance in a situation where economic and environmental factors have adverse effect on a major proportion of the child population. As a result, a variety of infections and infestations play havoc with the health of the children leading to morbidity and mortality among them. Reliable data on child morbidity and mortality are lacking even for the state not to talk of districts. Most of the information is on the prevalence of certain diseases but not adequate to assess the overall disease occurrence among the children. Further, the

TABLE 6.4
Percentage Prevalence of Deficiency Signs in Orissa

	Pre-School children	School going children 5-12 years
Number	123	210
No abnormality detected	73.9	41.4
Conjunctival xerosis	9.8	8.6
Bitot's spot	0.8	1.9
Total vitamin A deficiency	10.6	10.5
Angular stomatitis	7.3	18.6
Other B-Complex deficiencies	4.1	9.0
Total B-Complex deficiency	11.4	27.6
Caries	0.8	12.8

Source : NNMB, Report for the year 1982.

hospital statistics relate to only some of the most serious cases referred to them.

6.8 The age-specific death rate (0-4 years) to total deaths in Orissa is estimated to be close to the national average. More than 40% of the child deaths are from those aged 0-4 years (Table 6.5). The proportion is higher in rural areas (41.7%) than in urban areas (37.9%). The ADP study estimates the age specific childhood mortality rate (1-4 years) to vary between 42.3 to 38.8 in the five districts of Orissa. The report also pointed out that most of the deaths in early infancy could be attributed to maternal factors and in the late infancy to environmental factors, viz. living conditions, source of water supply, education of mother, standard of living etc. Respiratory and gastro-intestinal infections contribute substantially to mortality and morbidity among children from birth to pre-school age.

6.9 The ADP study examined major childhood diseases and found that the majority of surviving and deceased children had suffered from acute diarrhoea. A sizeable number of children had also suffered from worms, whooping cough, measles and pneumonia in both rural and urban areas of the state. Diarrhoea was the major killer for children. In an evaluation of the oral rehydration therapy (ORT) done by ORG in 1985 in Orissa, the incidence of diarrhoea was found to be higher in the 1-3 year age group of children in Keonjhar and Kalahandi districts. One possible reason could be the prolonged breast-feeding of children till about a year after birth (as discussed in the earlier Chapter). It is only when supplementary foods are introduced that the problem of diarrhoea occurs due to unhygienic food and environment. The duration of illness was reported to continue for 3-5 days and in a fifth of the cases, it exceeded one week. The loose motions were often accompanied with fever and mucous in stools. The frequency of motions was four to five times a day in as much as a third of the children suffering from diarrhoea. The liquid diet given during episodes of diarrhoea included breast milk, cow's milk and salt-sugar solution (sherbet). Several home-remedies prepared out of roots/herbs were given to control the motions.

Due to the concerted efforts put forth by the agency implementing ORT programme (which was launched as an educational campaign by CARE in 1985) it has taken the shape of an important programme run by the State Government. As a result, ORS

TABLE 6.5
Proportion of Deaths Among Children 0-4 Year to Total Deaths, 1983

State/ Country	Rural	Urban	Total
Orissa	41.66	37.89	41.40
India	42.98	32.79	41.47

Source : Ministry of Home Affairs, Office of Registrar General, Vital Statistics Division, SRS, 1983, New Delhi, 1986.

packets are easily available and distributed at the ORT counters at all district hospitals. Training programmes are also conducted for the staff for effective delivery of service.

Child rearing practices

6.10 Children are invaluable to the family. In the general population of Orissa and as reported for some tribes, there is no perceived discrimination against the girl child in infancy and early childhood. Whenever differential care and treatment in favour of the male child is observed, it usually takes place at later ages beyond five. This is not to deny the cultural differences in the rituals and other customs related to the sex.

6.11 The personality of a child is influenced largely by the parental upbringing and values inculcated during childhood. Love, indulgence and persuasion are usually combined with enforcement of disciplined conduct through verbal abuse, threat or even physical punishment. It is not rare to find child abuse in some situations when either of the parents may beat the child too excessively in a fit of anger, not necessarily caused by the child itself. The children learn from their parents and neighbours all the preferences and the prejudices in regard to food and drink, the ethnic groups around or within their localities and different occupations and skills. In tribal societies children also learn the prejudices and fears related to non-tribals, spirits, ancestral beings, etc. It is said scientifically that child rearing practices are primarily responsible for developing a particular personality in adult life. The aggressive, individualistic and intolerant behaviour and attitude of the Bondas are attributed to the fact as observed by Elwin, that the children in the Bonda society are very much left to themselves by the parents. The parents or the elders do not usually separate or chastise boys engaged in fights or brawls, for, they believe, that is the best way to train the child to take care of himself and his interests when he grows up. In other tribal groups like Bhuiyan of North Orissa aggressiveness in children is rather discouraged, though a boy may be helped to perfect his tools and implements to hunt

small animals and birds. There is a subtle transition from play to production activities among the boys, while among the girls, the women's roles are imbibed even from the childhood and are developed gradually over the years. The children learn more by observing, playing and imitating the grown-up than through direct instruction. Such instruction is, however, given only when one commits a mistake in imitating an adult. In such instruction by way of correction little verbalization is necessary. Teaching of morals is also restricted to a few occasions.

Home environment and learning opportunities

6.12 Physical conditions of learning are not fully conducive for learning for children from poorer households. There is usually no suitable light for reading inside the hut. The parents or the elders or the grown up boys and girls of the family usually go out to work every day, if work is available, and come back home in the evening, tired. There will be energy left for the women just enough to cook and serve the last meal of the day. Thus tiredness and sleep overcome them and the family goes to sleep early in the evening. In such a physical environment the child going to school is at a great disadvantage. The child has to fetch water, fuel, and take care of the livestock before the earning members return from work. If no mid-day meal has been served in the school, which is not given in every school, the child is already famished and half asleep due to exhaustion. The school going child, therefore, hardly finds any time, energy or opportunity to read and complete the homework after the school hours. With the literacy rate very low and the effective level of education for taking care of elementary education of the children at home even much lower, the parents among the absolute poor have neither the motivation nor the capacity, nor the energy in them to tutor their children. Only in those few villages in tribal areas or in other villages in the plains, where there is regular availability of electricity and street lights, the children have some opportunity to read outside their home in the evenings.

TABLE 6.6
Incidence of Diarrhoea by Age

Age group (month)	Experi- mental	% Control
Total		
1) 0-6	10	07
2) 6-9	10	14
3) 9-24	20	24
4) 24-36	18	18
5) 36-48	17	22
6) 48-60	17	09
7) 60-72	08	06
Total	100	100
No. of children suffering	213	207
KALAHANDI		
1) 0-6	11	12
2) 6-9	07	18
3) 9-24	22	18
4) 24-36	13	24
5) 36-48	09	20
6) 48-60	22	02
7) 60-72	16	06
Total	100	100
No. of children suffering	45	51
KEONJHAR		
1) 0-6	10	05
2) 6-9	11	12
3) 9-24	19	26
4) 24-36	20	17
5) 36-48	20	23
6) 48-60	15	10
7) 60-72	05	07
Total	100	100
No. of children suffering	168	156

Source : ORG Survey.

But as the overwhelming majority of parents, especially the father, would be at best first generation learners, the tradition, family motivation, parental drive and concern for educating the children would be minimal.

6.13 Among the educated families and in the middle class and higher class families in both rural and urban areas, there is a strong urge to do better and more for the education of the children than the previous generation could do. In such families already having second generation or third generation learners or even having the longer tradition of education as among some higher castes now-a-days pre-school education of children is also becoming popular. Moreover, usually it is a disgrace for such families, if the children of school going age do not study. Even the handicapped children are sought to be trained in special education in these families.

6.14 In rural areas, in the general population with the school within the walking distance, it is still very far from universal enrolment of children of school going age. The Department of Anthropology, Utkal University portrays the following picture of a village Sereipali in Nuapara block of Kalahandi district. There are 204 children in the age group 5-15 years out of which only 99 attend school, 13 children have already dropped out with 4 of them engaged as wage labourers and 8 as domestic or agricultural labourers and 1 herding cattle on a full time basis. There are 65 children, who have never studied at school, out of which 27 are working full time - 7 engaged in wage labour, 14 doing domestic work and 6 are cattle herders. 13 children have migrated along with their parents for work as labourers in Raipur district. The children engaged on casual basis for farming operations get daily wage of Rs. 4/- to Rs. 6/- only without food.

6.15 In the tribal areas like the Bonai of Sundergarh district, where the rural economy is based on shifting cultivation rather than permanent cultivation, the children either do not go to school or if they do, they drop out before completing even the elementary school of 4 classes. The pressure on the child to work for the family

at home, in forests or in the field in tribal areas is unavoidably heavy.

The situation is not at all different in case of the scheduled castes living in tribal villages but those in the plains are more familiar with the ways of the world, and are more motivated to go for pre-school, school and even higher education.

Integrated child development services

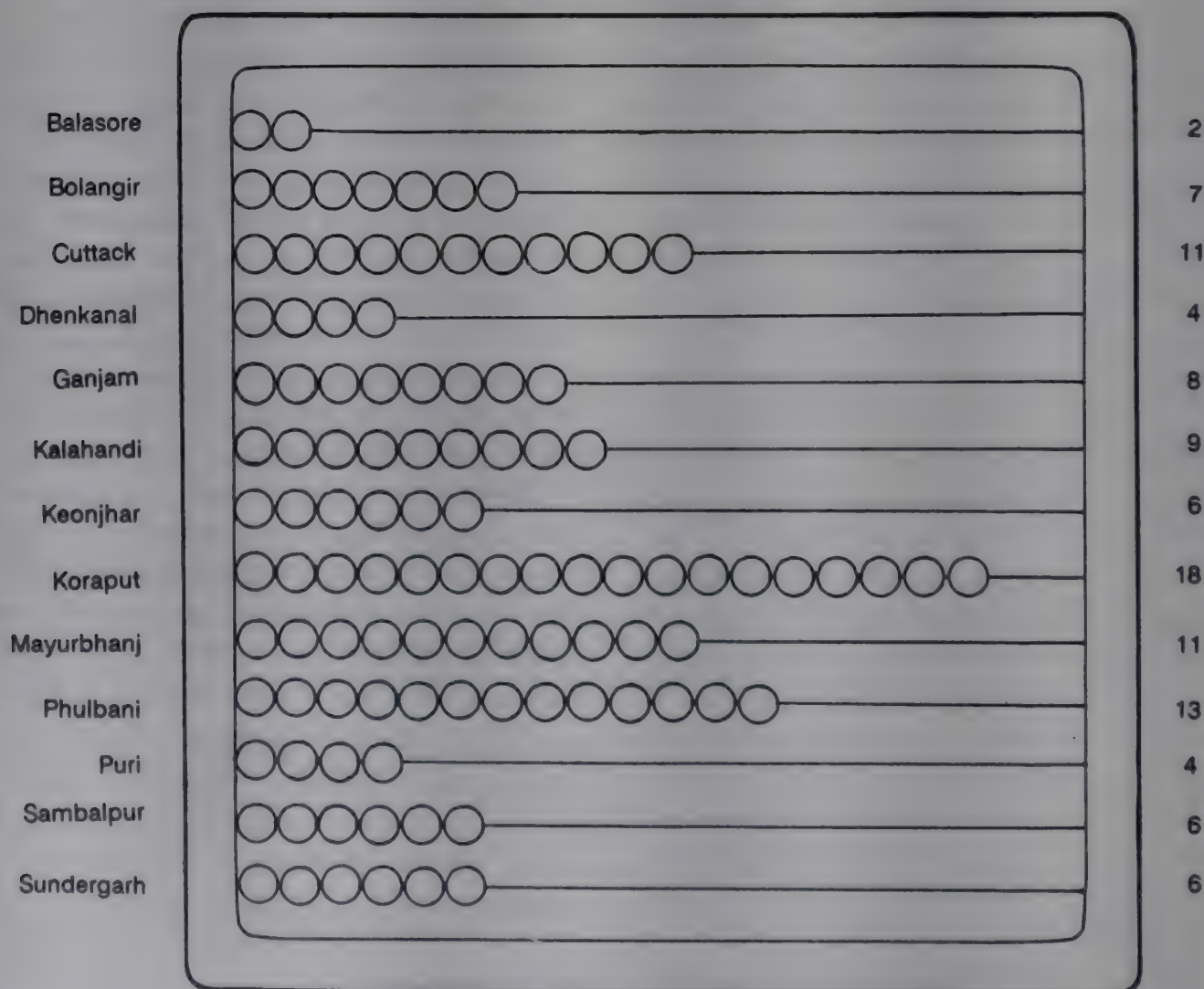
6.16 Keeping in view of the problems faced by women and children, the ICDS is one of the major interventions in child development. It started as an experimental project covering 33 blocks in 1975-76. In Orissa, the first ICDS project was launched in 1976 in Subdega block (Sundergarh). There are 105 ICDS projects in 314 blocks in the state. The coverage of project areas picked up steadily since 1982-83. The coverage of blocks shows a favourable tilt towards the tribal and backward districts.

6.17 The ICDS envisages provision of a package of services for the welfare of children below 6 years and pregnant and nursing mothers from 15-45 years of age. The services provided include :

- 1) Supplementary nutrition
- 2) Immunization
- 3) Health check-up
- 4) Referral services
- 5) Nutrition and health education
- 6) Non-formal pre-school education

6.18 An analysis of the coverage of beneficiaries under supplementary nutrition since the inception of the programme shows a ten-fold increase from 8848 in 1976-77 to 802666 in 1987-88. The increase is particularly conspicuous in coverage of children below 6 years. There is also a significant improvement in the coverage of beneficiaries under immunization which has picked

ICDS Projects in Orissa, 1989



up after 1979-80. Measles vaccine which was introduced in 1975 in the state protected 63900 children in the ICDS areas.

6.19 Of the six components of ICDS programme, the feeding, immunization and health check-ups were relatively more popular among the community than the health and educational components (NIS-WASS survey in 4 ICDS blocks). In spite of a high level of awareness of the ICDS programmes, the off-take of services was limited, probably due to :-

- 1) Lack of coordination among different implementing agencies,
- 2) Lack of resources for programme delivery,
- 3) Transport problems,
- 4) Personnel problems,
- 5) Lack of community participation,
- 6) Target oriented approach.

6.20 The ICDS programme envisages cooperation from staff of State Departments of Health and Family Welfare, Community Development & Rural Reconstruction, Education and Youth Services, and Harijan and Tribal Welfare. In the process of supplementaries, departmental priorities supersede common goals of ICDS and the progress of work suffers. The block level staff are often confused as regards their priorities and responsibilities. This is a case of lack of coordination among different implementing agencies.

6.21 Lack of resources come in the way of achieving the targets outlined for the area. Thus the staff may have to provide health

care without adequate stock of medicines, to immunize target group without sufficient refrigeration and vehicle facility, to provide supplementary feeding on a low budget per child per day, or teach essential aids.

6.22 In hilly rugged terrain, accessibility to far flung villages is rendered difficult without a vehicle. Hence many villages in ICDS areas remain unvisited by the staff. This also hampers food supplies to target population.

6.23 With the introduction of several development programmes, the field staff are required to take up additional responsibilities without commensurate incentives. This dampens the enthusiasm of the staff resulting in neglect of duties. Moreover some of them are not adequately trained for the purpose. The community support to ICDS is also not forthcoming. This is because the people are illiterate and poor. In their struggle for existence, the basic needs of food, clothes and shelter is of primary concern to them. Moreover there is a stiff resistance to change from traditional life styles to new practices. There is also a basic distrust of government officials who they feel impose regulations on the use of common property resources of the villages.

6.24 Thus, there are many bottlenecks to be removed if the programme is to make a significant impact on the lives of children. There is an urgent need to strengthen the ICDS structure and promote awareness of the programme in backward regions. There is a need to create a healthy atmosphere for the staff to work.

CHAPTER VII

The Disadvantaged Child

Social structure and values

7.1 The physical and mental well-being of a child can be developed by interventions from the government, local bodies, voluntary organizations etc., in the form of service delivery, supply of supplemental food, education and similar other things. But this alone does not promote the development of 'the whole child'. An important support for child survival and transition to adulthood is the social security to be derived, not from outside, but from within the home. The family exerts an important influence on the process of all round development of the child.

7.2 However with the pressure of work and type of work (industrial, mining, construction etc.) nuclear family structure is becoming more common particularly in urban areas as compared to rural areas. Higher cost of living and housing shortages as also specialised and restricted job opportunities at the urban places of work have led to this trend of living.

7.3 Irrespective of the type of family area, the social structure in Orissa is guided by certain basic social values. One of them is the value of living together in the family. Loyalty to the family, its reputation and its continuance is taken for granted. Any deviation from this loyalty is considered almost anti-social. Arising from this is the common obligation of the individual members to rally together at the time of crisis. Thus the mar-

riage ceremonies are also an arduous affair involving the family's reputation and status. Remaining unmarried is taken to be a measure of one's deficiency and not a matter of worthy or easy choice. In tribal societies, it is customary to marry, when one was capable of establishing a household of one's own. Similar is the situation among SCs.

7.4 A basic social value in the state is the dominance by the males within a patriarchal society. Girls are also educationally disadvantaged as they manage the domestic chores of cooking and care of younger siblings. In fact, the girl child, especially in tribal homes, enjoys no childhood. However with the changing times the old familial values based on strict gender differentials are gradually declining. While more of girls are being tapped through non-formal learning process, the women are increasingly going out to work.

7.5 Whenever both husband and wife go to work, the child is left in the care of domestic servants or some relatives from the village. The institution of creche is yet to gain mass popularity in Orissa. With the prolonged absence of parents coupled with loosening of old familial bonds in most of the families due to the absence of grand parents who entertain children with mythological folk lore and morals, the children tend to become deviant in their behaviour. The lack of social control in the family leads the child sometimes to

join the truants and adopt wayward habits. The child may also resort to drug use/smoking/alcohol/petty theiving etc.

Delinquent child

7.6 Some of the noteworthy features of juvenile delinquency in India are mentioned below and Orissa is no exception to it :

- 1) Juveniles in India make a relatively much small contribution to the total crime picture (Sandhu 1983). In the year 1978, the juveniles and youthful offenders were responsible for 3.5% of the total crimes committed under the Indian Penal Code. The juvenile crime rate in India was 6.9 per one lakh population.
- 2) Under the Indian Penal Code (IPC), the most common offence committed by the juveniles is theft, while under the special and local laws, the most frequently committed crimes were begging, vagrancy and other minor offences. On interrogation, some of the juveniles revealed that they were victims of crime perpetrated on them, rather than being criminals themselves.
- 3) The incidence of juvenile delinquency is confined to the urbanised and industrialised places. Orissa makes only

a marginal contribution of 1.1% of the all India figure of delinquency which reveals the protective attitude of the majority of families towards their juvenile population. The juveniles apprehended by age groups under IPC and local special laws is given in Table 7.1.

- 4) Female juvenile delinquency is negligible forming barely 6% of the juveniles apprehended in India (1978) while in Orissa, it constituted 2% (Table 7.2). The families generally try to protect and insulate female members from both delinquency and crime.

7.7 In pursuance of the Orissa Children's Act, 1982, which was given effect from 31.8.1986, the delinquent juveniles have been divided into two categories :

- (i) Child prisoners below the age of 16 years in case of girls are to be confined in the observation home-cum-special schools established at Berhampur and Rourkela under the Children's Act.
- (ii) Young offenders of 16 years of age and above in case of boys and 18 years and above in case of girls (up to 21 years) have been categorized under juvenile delinquents to be confined in juvenile

TABLE 7.1

Juvenile Delinquents Apprehended in Orissa by Age Groups

Age groups	Year	IPC	Local & special laws	Total
7-12	1978	31	12	43
	1979	28	—	28
13-15	1978	87	19	106
	1979	110	5	115
16-18	1978	136	27	163
	1979	141	4	145
18-21	1978	217	43	260
	1979	372	20	392
Total	1978	471	101	572
	1979	651	29	680

Source : Child in India, 1985.

TABLE 7.2

Delinquent Juveniles Apprehended in Orissa by Sex

Sl. No.	Particulars	Year	Boys	Girls	Total
1.	Indian Penal Code	1978	462	9	471
		1979	647	4	651
2.	Local & Special Laws	1978	99	2	101
		1979	29	—	29
Total		1978	561	11	572
		1979	676	4	680

Source : Child in India, 1985.

jail at Anugul and other jails having facility for confinement of juvenile prisoners.

7.8 Data available from the Govt. Jail at Anugul for the juvenile delinquents shows that 185 children (aged 15-20 years) were admitted to the prison in 1984 while 518 were under-trials. These figures decreased during the subsequent two years. However, one interesting observation is that there are no female juvenile/youthful offenders during these three years.

A more recent analysis of the delinquent children lodged at observatory homes in Rourkela and Berhampur shows that the total inmates are gradually declining since the inception of the programme in October 1987. The inmates admitted to Rourkela are much higher than those for Berhampur.

Combating juvenile delinquency

7.9 The registration of juvenile delinquents in Orissa was formerly handled by the Inspector-General of Prisons, Orissa. Since the enactment of the Juvenile Justice Act in 1987, the scheme has been transferred to the Department of Community Development and Rural Reconstruction (C.D. and R.R.). The High Court of Orissa has been moved through the Home Department to establish 13 Juvenile Courts at the rate of one per district. Twelve observatory homes are proposed to be opened in the state, one in each district except Sundergarh. Pending

the construction of buildings for the observatory homes, the existing centres at Rourkela and Berhampur are utilized for detaining child offenders.

7.10 In order to rehabilitate the delinquent children the Government has appointed special officers for the purpose. Each district has a District Probationary Officer to take care of the first offenders. There are after care shelters for rehabilitating these children in Cuttack, Puri, Balasore, Berhampur, Sambalpur, Sundergarh and Bolangir. Further there are 17 Sub-divisional Probationary Officers in the 13 districts to cater to the offenders at the sub-divisional level. They are assisted by 17 Prison Welfare Officers at selected prisons of whom three are ladies. A probationer's hostel functions at Anugul while a Central Home for men operates at Baripada.

7.11 The implementation of the Juvenile Justice Act is expected to adequately cater to the specific needs of the delinquent children and help to assimilate them into the mainstream of life as normal children in Orissa.

Destitute children

7.12 Destitute children are socially disadvantaged. The estimates of destitutes in Orissa vary. A child is treated as a neglected child as per the children's Act, 1960, if he or she —

a) is found begging;

- b) is found without having any home or settled place of abode or means of subsistence;
- c) has a parent/guardian who is unfit to exercise control over the child; and
- d) lives in a brothel or frequently goes to any place used for prostitution or is found to be associated with any prostitute who leads an immoral/drunken/deprived life.

7.13 According to the Planning Commission, it has been estimated that about 0.5% of the children in the country up to 14 years are destitutes while in Orissa, they constitute hardly 0.1%. As on March 1981, there were 38 Government-run homes for the destitute children in Orissa providing recreation, health check-up, treatment for ailments, immunization and case work service. These centres house 1808 children of various age groups. Thus the centres are grossly inadequate for all the destitute children. These child home centres have a predominance of boys over girls (3:1). Of the inmates, majority are of 5-9 years of age followed by 10-14 years group. In addition, there were 266 children supported by other schemes in these centres with double the number of boys than girls. Here again, the 5-14 group accounted for bulk of the destitute children enrolled in homes. Thus compared to the size of destitute children in the state, facilities to take care of them are quite inadequate not to speak of the quality of life available to inmates of such child Home centres. This is the area where non-governmental organizations have a major role to play to alleviate the suffering of destitute children.

Orphan children

7.14 The estimated number of orphans in Orissa in 1986 is about five lakhs according to a projection made by M/s Patnaik/Saxena/Vijayam and Prasad in Demographic and Socio-Economic Aspects of Child in India. The number of orphanages in Orissa has grown manifold over the last 15 years. This has gained support after the enactment of the Orissa Orphanage Act, 1985. Under the Act, Orphanages housing at least 25 inmates

and providing boarding facilities may be recognised by the Government for assistance in the form of grants-in-aid. The orphanages are of two types — centrally sponsored and non-plan. The former was started in 1974-75 with 6 institutions getting financial assistance for housing 140 children. The non-plan scheme started in 1976-77 with 12 institutions caring for 712 children. Presently, there are 48 orphanages in the non-plan sector with 1965 children and 70 orphanages in the non-plan sector with 1965 children and 70 orphanages with 2463 children under the centrally sponsored plans (Table 7.3). The district-wise details are given in Table 7.4. The total expenditure incurred on the non-plan sector institutions in 1988-89 was Rs. 34.25 lakhs while under the centrally sponsored scheme, the expenditure was Rs. 39.88 lakhs shared on 50:50 basis between the State Government and the Government of India. Considering both the schemes, Rs. 79.13 lakhs are being spent to house 4428 children which gives an annual per child expenditure of Rs. 1674 which by all means is too inadequate to meet the child needs. Moreover, this expenditure also includes the administrative expenditure not to speak of leakages.

7.15 While the growth of institutions is one step towards rehabilitating the destitute and orphan children, there is nothing as valuable as providing family support and care to these children. These children must be brought closer to the other children through the process of development. Foster care through large scale adoptions should be made less cumbersome and rigid. As per the Hindu Adoption and Maintenance Act, 1956, Hindus could adopt a Hindu child only, while Muslims, Christians and Parsis could only take up guardianship and not adopt them. On account of this Indian children are being sent abroad to be adopted by foreigners after complying with foreign laws and customs. In case of difficulty in finding a family in India for adoption, efforts are needed to find out Indian families abroad, who can adopt children rather than giving them under the care of foreign parents. There should be a common law for adoption of all Indian

citizens. There is also a need for a centralized agency in the state to coordinate the work of all voluntary agencies, engaged in this activity. This could simplify the task of identification and enrolment of needy children.

Disabled child

7.16 A major form of deprivation is disability. A disabled child has been defined as

one who is unable to ensure by himself/herself, wholly or partially the necessities of a normal individual or social life including work, as a result of deficiency, whether congenital or not in his/her physical or mental capabilities. The first attempt at collecting data on the physically handicapped was made in 1981 census in consonance with the UN-Declaration of the year of the Disabled. The total number of disabled persons

TABLE 7.3
Orphanages in Orissa (1974-75 to 1988-89)

Year	No. of Institution		No. of children		Expenditure (Rs. Lakh)		
	Non-plan	Centrally sponsored plan	Non-plan	Centrally sponsored plan	Non-plan	Centrally sponsored	
						State share	GOI share
1974-75	—	6	—	140	—	—	0.40
1975-76	—	24	—	585	3.83	—	7.66
1976-77	12	30	712	915	3.98	—	8.03
1977-78	12	38	712	1147	3.98	—	18.18
1978-79	10	37	662	1857	5.28	—	15.21
1979-80	35	37	2128	110	18.96	0.58	8.90
1980-81	35	37	2118	520	20.92	2.06	2.06
1981-82	33	39	2025	585	20.55	2.95	2.95
1982-83	36	45	2025	760	20.92	3.44	3.44
1983-84	35	49	1940	810	20.92	4.54	4.54
1984-85	35	53	1940	874	20.41	4.37	4.37
1985-86	35	54	1940	924	20.45	7.27	7.27
1986-87	35	55	1940	1368	33.77	11.52 + 9.65 = 21.17 *	11.52
1987-88	37	59	1965	1693	34.20	15.37 + 4.80 * = 20.17	15.37
1988-89	48	70	1965	2463	34.25	19.94	19.94

* Outside sharing

Source : CD & RR Dept., Govt. of India.

TABLE 7.4
Orphanages in Districts *

Sl. No.	District	No. of orphanages	No. of children
1.	Balasore	10	920
2.	Bolangir	1	25
3.	Cuttack	7	417
4.	Dhenkanal	3	100
5.	Ganjam	7	531
6.	Kalahandi	3	210
7.	Keonjhar	1	100
8.	Koraput	6	256
9.	Mayurbhanj	3	64
10.	Phulbani	6	385
11.	Puri	6	245
12.	Sambalpur	3	255
13.	Sundergarh	3	150
		59	3658

* As on April 1, 1988

Source : Dept. of Panchayatiraj, Govt. of Orissa

according to 1981 census in Orissa was 61298 with large variations among districts. Cuttack reports the largest proportion (12.83%) of disabled as compared to the

lowest proportion in Phulbani (3.02%). However, the data broadly categories them as blind, deaf and dumb and is not available by age group of persons or prevalence by types of disability in rural and urban areas.

According to the report on Child in India, the incidence of the orthopaedically handicapped was high in both the rural and urban areas. For every lakh of persons, it was estimated that there were 729 orthopaedically handicapped persons in rural areas and 629 in urban areas. The visually handicapped were next in order of prevalence with 758 per lakh persons in rural areas and 501 per lakh in urban areas. There were distinct gender differentials with more of females than males affected by blindness in both rural and urban areas. This could be correlated with a higher degree of malnutrition among women than men at all stages of growth. The prevalence of communication disability was relatively lower than all other types of disabilities (Table 7.5).

7.17 A pilot survey of the disabled children was conducted by the District Rehabilitation Centre (DRC) located at Bhubaneswar at two places Balipatna and Baliana in Puri District for intensive identification of persons suffering from some handicap (Table 7.6).

7.18 The major problems of disability are identification and treatment facilities. The treatment of physical disability is cost prohibitive in most cases; and is centralized in urban locations. Hence for the bulk of the

TABLE 7.5
Estimated Rate of Disability in Orissa

(No. / 1 lakh population)

Sl. No.	Type of disability	Rural			Urban		
		Male	Female	Total	Male	Female	Total
1.	Visual	604	908	758	458	552	501
2.	Hearing (5 yrs. + above)	924	759	842	387	373	382
3.	Speech (5 yrs. + above)	369	236	303	219	208	214
4.	Locomotor	917	544	729	722	522	629

Source : Child in India, 1985.



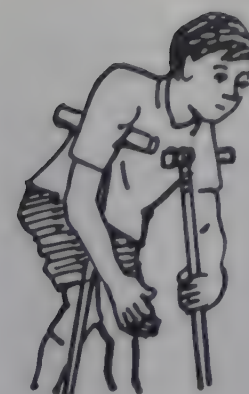
Visual
Rural - 758
Urban - 501



Hearing
Rural - 842
Urban - 382



Speech
Rural - 303
Urban - 214



Locomotor
Rural - 729
Urban - 629

patients in the rural areas, these services are inaccessible and unaffordable. Orissa has the distinction of having a national institute set up under the Ministry of Welfare in 1984 known as the National Institute of Rehabilitation Training and Research (NIRTAR). It is a registered society and has been functioning since 1984 with the basic objective of rural rehabilitation and training. Prior to NIRTAR, the National Institute of Prosthetic and Orthotic Training (NIPOT) was working since 1984 as a unit of the Artificial Limbs Manufacturing Corporation of India. This institute is located in Bairoi village of Cuttack district and provides specialised care for the orthopaedically handicapped by surgery, physiotherapy and preparation of low cost mobility aids. The Institute has an 85-bedded hospital for indoor patients.

7.19 This institute had undertaken a state-wide survey of disabled population covering

a sample of 5000 households in 1978-79. Results of the survey show 11.8% of the population in the state is disabled (Table 7.8). The major types of disability are : (1) difficulty to walk long distances and (2) difficulty to squat or bend back. The disability figures were higher for females (12.5%) than males (11.06%). A similar trend is observed for the handicapped with 10.8% of female population afflicted as against 10.1% for males. The handicap was experienced usually in performing household activities (9.5%) and work outside the home (4.6%) (Table 7.9). The chronically impaired persons who reported some health problems (and not necessarily handicapped) were the largest in proportion (54.7%). This impairment could lead to a permanent handicap if left untreated (Table 7.10).

7.20 Analyses show that children within 1 year of age do not have any physical

TABLE 7.6
Cases Identified in Balipatna

Type of disability	Age Groups (years)			Total
	0-4	5-9	10-14	
1. Orthopaedic	31	56	47	134
2. Visual	-	1	1	8
3. Mental	8	20	15	43
4. Speech and hearing	11	44	55	110
5. Multiple handicap	-	2	-	2

Source : DRC, Bhubaneswar

deformity or handicap (Table 7.11). They suffer from chronic impairment only. Among children 1-4 and 5-9 years of age, the disability sets in gradually. In fact, in these age

capped persons and provide education, vocational training and rehabilitation services. Such institutions are functioning with limited resources and scope. While some

TABLE 7.7
Cases Identified in Balipatna

Type of disability	Age Groups (years)			Total
	0-4	5-9	10-14	0-14
1. Orthopaedic	24	50	52	126
2. Visual	-	3	8	16
3. Mental	4	19	24	47
4. Speech and hearing	3	32	42	77
5. Multiple handicap	-	-	-	-

Source : DRC, Bhubaneswar

groups, they are less than 10% children clinically free from any symptom whatsoever. The major disease affecting them is chronic impairment. For older children, the incidence of chronic impairment reduces but disability or handicap rises. However, the disabled and handicapped patients are found more among persons aged above 35 years.

7.21 There are institutions for the deaf, blind and mentally retarded. The primary aim of these institutes is to enrol the handi-

services for the disabled exist in the voluntary sector, with or without government support, the coverage of these is very limited in comparison to the needs of the number of the disabled children or adults. Given the close connection between childhood disability and poverty, It would be useful to reorient public policy on subsidizing the services to the population at large. The Government and other funding agencies could provide financial assistance for organizational support and also assistance for aids and appliances.

TABLE 7.8
Prevalence of Chronic Impairment, Disability or Handicap in Orissa

Symptom	Male %	Female %	Total %
Chronic impairment	53.6	55.9	54.7
Disability	11.06	12.5	11.8
Handicap	10.1	10.8	10.5
Without above symptoms	45.7	43.5	44.6

Source : NIRTAR Survey, 1978.

TABLE 7.9

Prevalence of Handicap - Orissa Study

Type of Handicap	Male prevalence %	Female prevalence %	Total
Activities of Daily Living	3.7	4.1	3.9
Household activities	8.5	10.4	9.5
Work outside home	4.6	4.6	4.6
Social activities	0.8	0.6	0.7
Total prevalence of above handicaps	10.1	10.8	10.5

Source : NIRTAR Survey, 1978.

Child labour

7.22 A sizeable level of child labour prevails in the state in spite of the steps taken up by the state government to eradicate this social evil through legislation. The child labour mostly belong to the age-group of 5-14 years. As main workers, children accounted for 4.92 lakhs in 1971 which increased to

5.15 lakhs in 1981. Presently, every 20th child is a worker. Besides the main workers, 1.87 lakhs children have been enumerated as marginal workers in 1981. Taken together, total number of child workers is estimated to be 7.02 lakhs which claims 7% of the total workers (main + marginal in the state) (Table 7.12).

TABLE 7.10

Number and Percentage of Total Sample having Various Combinations of Chronic Impairments, Functional Limitations and Disabilities

Any Chronic Impairment present	Any functional limitation present	Any type of Disability present	Males		Females		Total	
			N	%	N	%	N	%
NO	NO	NO	5040	45.7	4648	43.5	9688	44.6
YES	NO	NO	4672	42.3	4600	43.1	9272	42.7
YES	YES	NO	247	2.2	229	2.1	476	2.2
YES	YES	YES	897	8.1	1045	9.8	1942	8.9
YES	NO	YES	103	0.9	91	0.9	194	0.9
NO	YES	NO	69	0.6	45	0.4	114	0.5
NO	NO	YES	2	0.0	1	0.0	3	0.0
NO	YES	YES	8	0.1	17	0.2	25	0.1
Total			11038	100.0	10676	100.0	21714	100.0

Source : NIRTAR Survey.

TABLE 7.11

Prevalence of Chronic Impairment (CI), Disability (DIS) and Handicap (HC) by Sex and Age - Orissa Study

Age group	Male				Female			
	O	CI	DIS	HC	O	CI	DIS	HC
0-1	69.4	30.5	—	—	69.9	30.1	—	—
1-4	8.3	91.7	1.9	0.7	7.5	92.5	1.0	0.7
5-9	4.5	95.4	3.2	1.3	6.0	93.8	2.0	0.6
10-14	55.9	43.4	4.4	2.4	64.4	35.1	3.2	1.4
15-19	73.6	25.8	3.8	3.1	75.7	23.6	4.0	2.9
20-24	72.2	27.0	4.2	4.5	67.6	31.9	6.0	4.7
25	65.5	33.5	8.7	7.7	59.5	39.9	9.9	9.2
35	58.8	40.5	12.9	10.7	47.1	52.0	19.4	18.2
45	44.4	54.8	26.3	27.4	37.2	60.9	32.5	29.2
55	34.9	63.1	38.5	33.4	28.2	70.8	45.1	41.1
65	18.0	79.4	57.2	47.3	21.9	70.8	58.0	49.2

O = No. CI, DIS or HC

Source : NIRTAR Survey.

7.23 Examining 1981 census data, it is found that the participation rate of child labour (main + marginal) in the age group of 5-14 years is much less in urban areas (3.7%) compared to rural areas (10.3%); the

overall participation rate for all children being 9.6% (Table 7.13). One of the reasons for a higher participation rate in rural areas is that agriculture, which is the main sector for rural employment, includes a large

TABLE 7.12

Work Participation Rate Among Children by Sex

(%)

Sex	Child labour to total workers		Child labour to total child population	
	1971	1981	1971	1981
Male	6.9	5.3 (5.9)	9.1	7.4 (8.2)
Female	9.3	9.1 (10.3)	1.5	2.5 (5.1)
Total	7.2	6.0 (7.0)	5.3	4.9 (6.7)

(Figures in Parentheses represent participation rates including marginal workers)

Source : Census of India, 1971 & 1981

TABLE 7.13

Work Participation Rate Among Children by Sex and Area 1981 (% of Children aged 5-14)

Sex	Rural		Urban		Total	
	Main	Marginal	Main	Marginal	Main	Marginal
Male	11.3	1.5	4.6	0.3	10.5	1.3
Female	3.7	4.2	1.8	0.6	3.5	3.8
Total	7.5	2.8	3.2	0.5	7.0	2.6

Source : Census of India, 1981

number of jobs needing no special skills and as such can be easily adopted by children. Besides, the low income level of rural households compels the children to work. This is in contrast to the urban situation where most of the jobs are in the organized sector. In rural areas, there are certain occupations like grazing animals etc., which largely engage children besides farming operations like sowing/transplantation, weeding, cleaning, sorting/grading etc., which they do along with women workers. In urban areas, children are quite often seen working in tea shops, restaurants/hotels, cycle repairing shops, grocery and other shops and in beedi making, agarbatti making, match industry and other cottage/small industries.

7.24 Between male and female children, the former claims the bulk of the child labour (62.2%). However, between 1971 and 1981 the proportion of females in the total child

labour has increased from 14% to 24.7% (as main workers) and 37.8% (as main + marginal) in 1981 (Table 7.14). As such, for 11.8% of the males and 7.2% of the females aged 5-14 years, the working age starts much earlier than 15 years to continue until retirement. This results in non-enrolment and high incidence of dropouts in schools. The increasing participation rate among female children is attributed mainly to abject poverty specially in backward districts. The parents are forced to send their female children for work mainly as farm workers in rural areas and as domestic workers in both rural and urban areas to supplement household incomes.

7.25 The tribal dominated districts of Koraput, Phulbani, Mayurbhanj and Kalahandi which are all economically backward, have larger population of child labour as against the relatively more developed and less tribal inhabited districts like Cuttack,

TABLE 7.14

Composition of Child Labour by Sex

Sex	1971		1981	
	Main workers	Main	Marginal	Total
Male	86.0	75.3	26.4	62.2
Female	14.0	24.7	73.6	37.8
Total	100.0 (4.92)	100.0 (5.15)	100.0 (1.87)	100.0 (7.02)

(Figures in Parentheses indicate Child labour in lakhs)

Source : Census of India, 1971 & 1981

Puri and Balasore. As Table 7.15 indicates, there is a close relationship between child labour and poverty. Conclusively, there is a search for some income earning activity for children at the cost of schooling. In the conflicting choice between income for immediate living and development of the child for better productivity in future the former takes preference leading to perpetuation of child labour. For the planners, this vulnerable group needs immediate attention to gradually eradicate this social evil.

7.26 Although several measures and programmes have been taken up by both government and non-governmental organizations for the welfare of the different types of disadvantaged children in the state, the impact of these on the overall growth of

these children is not known. There is also no information to find out the family background and the environment under which they had grown. Therefore, there is a need to identify the factors for the different forms of social disadvantages of children besides ascertaining the adequacy and efficiency of different measures being implemented.

7.27 The plausible reasons for the high incidence of child labour are –

- 1) The existing laws and statutes forbidding the employment of children under the age of 14 are enforceable only in organized sectors and those under direct supervision of labour authorities. It is mainly the unorganized agricultural sector which absorbs the impoverished rural child labour.

TABLE 7.15

Distribution of Child Labour in Orissa Districtwise 1971 & 1981

(%)

District	Percentage of child workers to total workers		Percentage of child workers to total children	
	1971	1981	1971	1981
1	2	3	4	5
1. Balasore	3.56	3.81	2.15	2.66
2. Bolangir	9.33	8.12	8.00	8.52
3. Cuttack	3.13	1.68	2.09	4.36
4. Dhenkanal	6.98	6.20	4.82	5.52
5. Ganjam	7.89	8.61	5.87	8.82
6. Kalahandi	14.07	12.18	10.24	12.30
7. Keonjhar	6.71	6.35	4.63	6.20
8. Koraput	10.46	10.44	8.62	12.72
9. Mayurbhanj	8.67	8.20	6.60	10.09
10. Phulbani	8.93	9.71	7.58	11.93
11. Puri	4.72	4.08	3.35	3.26
12. Sambalpur	7.33	4.65	7.77	7.85
13. Sundergarh	7.86	6.92	5.73	6.75
Orissa	7.19	7.01	5.30	6.72

Source : Census of India, 1971 & 1981

2) Even if children are employed in the secondary and tertiary sectors, there is a possibility of under reporting thus bringing down the proportion.

7.28 Over-crowding of child labour in the primary sector means increasing marginalization for them, for wages in the sector are deplorably low, not comparable with the Minimum Wages Act. This is borne out by the data from 25th round of NSS of rural population. The household distribution on the basis of monthly per capita expenditure classes shows that those who spent less than Rs. 30 per capita per month constitute the vast majority of the rural wage earners (covering 72.5% of wage earners & cultivators). The household composition of these two categories of workers revealed

that children are more numerous than either adult males or females in these households. Thus these children have to go from "Swaddling clothes straight into working gear" to keep starvation of themselves and their parents at bay.

7.29 The children face very unsatisfactory conditions in their employment. They work for long hours. In urban informal sector the children work in ill-ventilated, ill-lighted and dirty settings. Their wages are also low. No protective measures have been made to ameliorate their working conditions. Their terms and conditions of employment are also determined arbitrarily and unilaterally. There is neither any formal contract nor any security of employment.

CHAPTER VIII

A Profile of Women

The need

8.1 Women are the principal providers of care and support for infants and children. The role of women in the economy and their status in society thus become crucial for the growth of children and their development.

8.2 The trends in health, nutrition, demography and education have almost always been adverse to women. The major causes for this imbalance are both economic and social. The former arises out of poverty conditions leading to intra-household differentials and the latter out of inborn prejudices and attitudes to women's problems and development.

Unequal access to health

8.3 In spite of the availability of maternal and child health facilities, the pre-natal and post-natal care of women is not adequate. This is largely attributed to social factors whereby women do not usually visit a male doctor, and there are not enough lady doctors in the rural areas. Large scale under reporting of women's illness is also suspected, especially from rural areas. It is reported on the basis of records of indoor and outdoor patients of medical institutions that for every 3 men who avail of health services only a woman does so.

8.4 The ADP report (1987) ascertained the problems encountered by the respondents while attending the PHC/clinics. The main

problems that emerged are insufficient supply of medicine, doctors' negligence and inconvenient clinic hours. The major reasons among those who reported not visiting a clinic were 'treatment not required' and monetary difficulties. These reasons could well apply to the women resulting in poor attendance at the hospitals.

8.5 These broad observations are further strengthened by the review of the same project six years later by ORG. As a part of the review work, an indepth case study of outdoor and indoor patients was undertaken in Sinapalli PHC of Kalahandi district. There were 75 females and 131 males registered at the outdoor during 3 days of field observations (Table 8.1). When analysed by age groups it was found that 28% of males who had visited the outdoor ward were in the 15-24 age group as against 3% among females. The proportion of females is much less than males even for the 25-39 age group also. In fact these two groups represent the peak reproductive periods for females. The analysis of morbidity pattern shows that those patients who were diagnosed as anaemic were all females. Of course the indoor patients were mostly females mainly for delivery or pregnancy complications.

Women - The invisible workers

8.6 Besides being producers, processors and distributors of food to their families,

TABLE 8.1

Turnover of Outdoor Patients in Sinapalli
PHC, Kalahandi District

	Male	Female	Total
Children			
0 - 2	2.3	9.3	4.8
2 - 14	13.0	22.7	16.5
0 - 14	<u>15.3</u>	<u>32.0</u>	<u>21.3</u>
Adult			
15 - 24	28.2	2.7	18.9
25 - 39	32.1	26.6	30.1
40 - 44	6.1	14.7	9.3
45 and above	18.3	24.0	20.4
15 +	<u>84.7</u>	<u>68.0</u>	<u>78.7</u>
All ages	63.6	36.4	100.0
Total	100.0	100.0	100.0
N =	131	75	206

ORG Survey (Based on 3 days field observation)

women are also earners of essential cash income which goes towards satisfying the basic needs of the family. Women, therefore, do double the work - as unpaid labourers in

the home and as paid labourers outside the home. However, their work largely goes unnoticed and hence, they are invisible workers. The ways in which women earn money and spend it are of crucial importance and studies show that cash in the hands of women is likely to be directed towards basic health and nutrition of their children. Evidence indicates that who earns the income is almost as important as how much is earned. Wage earning women are more likely to have a say in the household expenditure in relation to health and nutrition of women and children in the house.

8.7 Generally the poorer the households, the more burden the women have to shoulder. Nearly 80% of the female work force is engaged in farms either as cultivators or as labourers. However, the proportion of farm labourers is more among women than men (Table 8.2).

8.8 Within the farm sector, women are allotted work involving greater drudgery. It has been estimated that apart from domestic duties women are engaged in agricultural operations on an average for about 12 hours a day on the farm and in taking care of cattle. Clearly, increasing the female work participation rates is not sufficient to raise women's status. A survey conducted by N.S.S.O. in 1977-78 showed that a third of the working women in Orissa were engaged in domestic activities like collection of fish, firewood, kitchen gardening, care of birds and collection of drinking water. This was close to the trend noticed for the country.

Women Employees

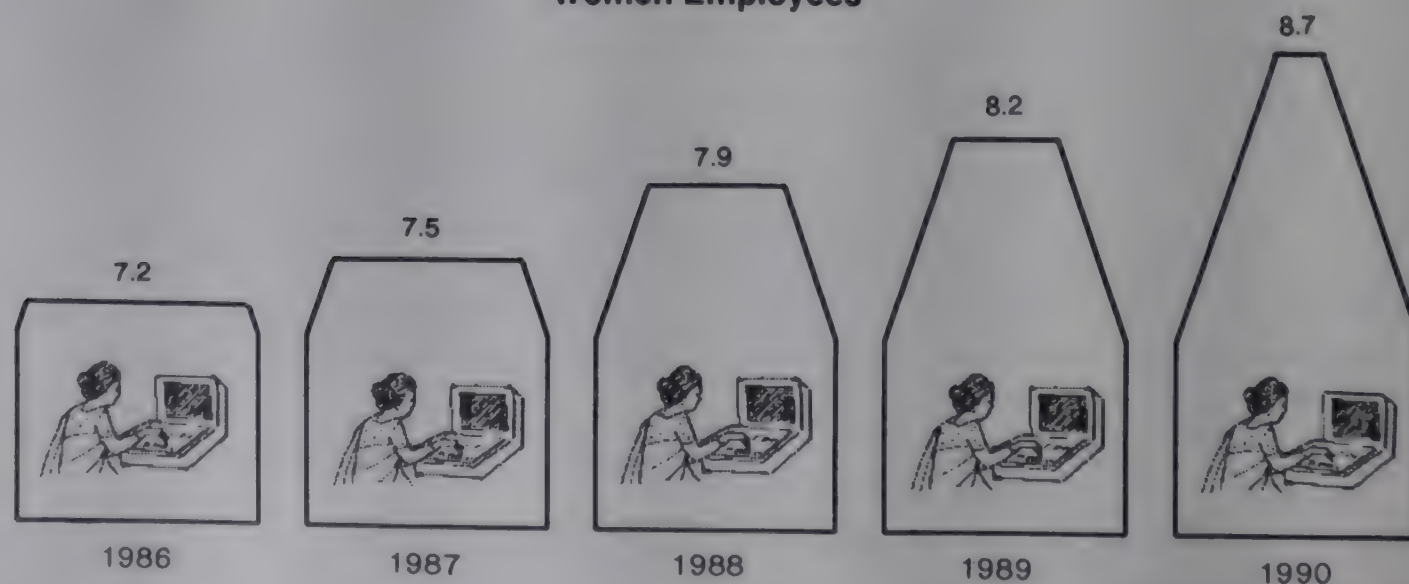


TABLE 8.2
Female Main & Marginal Workers in
Orissa, 1981

A.	Main Workers	16.1
1.	Cultivators	24.5
2.	Agri. Labourers	54.2
3.	Household Industry	5.7
4.	Other workers	15.6
	Total	100.0
B.	Marginal Workers	85.80
C.	Non-workers	64.06

Source : Census, 1981.

The rural-urban differentials were significant in respect of two activities-sewing and tutoring one's own children which was markedly higher in urban areas than in the villages.

Educational neglect

8.9 One of the major reasons for the imbalance between sexes in all spheres of life is education. Education holds the key to all development, health, nutrition, employment and earnings. Female literacy and education along with employment and income, are decisive for the improvement in the quality of the family's life and steady reduction in fertility. Education of mother has greater impact on the growth and development of her children.

8.10 In Orissa, the rate of female literacy is slowly increasing over the years. While hardly one out of every 10 women could read and write in 1961, three in every ten women today are literate. The districts with more than the state average in female literacy are Cuttack and Puri which are also the most economically advanced districts. However, the literacy among SC/ST is quite dismal. Only 9.4% of SC and 4.8% of ST female population are literate in 1981, almost on par

with the 1961 figures. Among districts, Cuttack ranks first in terms of SC literacy while Sundergarh occupies the first place for ST literacy, mainly because of relatively higher urbanization as a result of industrialization.

8.11 Social attitudes towards women's education seem still to be rather negative. According to an ORG study done in 1989, 13% of respondents in tribal areas reacted sharply to the proposition that girls should be educated at all, the same figure for non-tribal areas was 3%. The major reason cited was that girls would eventually marry and set up their homes. Therefore there was no need of education for them. This view is often expressed even in urban areas.

Economic support

8.12 Illiteracy, poverty and social neglect apart, women also lack ownership of productive assets which help in major decision-making and above all ensure livelihood. The National Perspective Plan for Women has succinctly pointed out that women must have access to capital resources in all development programmes. Thus the IRDP, ERRP and similar anti-poverty programmes have stipulated that 30% of the beneficiaries should be women. Similarly the Self-employment Scheme for Educated Unemployed Youth (SEEUY) has also assisted some women beneficiaries with productive capital. A programme aimed at placing working capital in the hands of women is the Urban Basic Services implemented in the urban slums of selected municipalities in Orissa.

8.13 The Development of Women and Children in Rural Areas (DWCRA) is an exclusive programme for women to mobilize them into core groups for production and marketing of commercial products. A rotating fund is created in the village where the group exists and the women can take loans by turns. In Orissa, the DWCRA has started functioning since 1983-84 in five districts of Bolangir, Kalahandi, Sambalpur, Sundergarh and Dhenkanal. Under the programme groups of women are formed. A group consists of 15-20 beneficiaries who avail of a composite loan of Rs. 15,000 per group. The

assistance can be used for any productive purpose as decided by the group. The programme is monitored by the respective DRDAs of the districts. An analysis of the year-wise performance of the programme shows that it has gained quick momentum since 1983-84 when there were only 100 groups to 769 groups in 1987-88. The membership has also increased manifold from 1818 to 14009 during the same period. However, the progress appears to have slid down during 1988-89 as can be seen from Table 8.3. As there has been no evaluation of this programme in Orissa, it is not possible to comment on the performance of the programme. It would be useful to conduct a review of working of this programme to ensure a better impact of the programme on the women beneficiaries in the state. However according to UNICEF reports, DWCRA has generally strengthened the administrative structure for delivery of services for women. With the renewed emphasis on women's development in the Seventh Plan, the State Government has streamlined the procedures for release of capital fund to the

groups which should facilitate a larger coverage of women under economic programmes.

8.14 Better information on the educated women's accessibility to credit is obtained by the performance of the SEEUY scheme in Orissa. The statistics reveal that the proportion of women entrepreneurs has steadily increased from the fact that there were six districts with no women entrepreneurs in 1986-87, the position has dramatically changed in 1986-87 with 12 of the 13 districts reporting units set up by women entrepreneurs. Among the districts with an increasing number of women entrepreneurs are surprisingly Koraput and Sundergarh mainly because of increasing industrialization and urbanization in these districts. Rourkela and Bhubaneswar DICs also have registered a rising trend in the number of units set up (Table 8.4) may be due to the impact of urbanization.

Early marriage

8.15 About 50 years back in spite of the Act of 1929 against child marriage, marriage

TABLE 8.3
Coverage of Beneficiaries under DWCRA

District	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Bolangir	450 (25)	1816 (120)	1526 (100)	1680 (135)	3868 (200)	400 (20)
Dhenkanal	493 (25)	2197 (120)	1947 (100)	2650 (150)	1600 (87)	57 (3)
Kalahandi	500 (25)	2323 (120)	2000 (100)	3045 (104)	4015 (191)	—
Sambalpur	375 (25)	1775 (120)	2157 (100)	2157 (150)	3011 (200)	1425 (95)
Sundergarh	—	—	—	81 (5)	1515 (91)	1742 (104)
Total	1818 (100)	8111 (480)	6911 (400)	9613 (544)	14009 (769)	3624 (222)

(Figures in parenthesis indicate groups)

Source : Dept. of Panchayatiraj, Govt. of Orissa

TABLE 8.4

Self Employment for Educated Unemployed Youth (SEEUY) Units Set up During the Year by Women Entrepreneurs

Sl. No.	Name of the D.I.Cs	1983-84	1984-85	1985-86	1986-87
1.	Balasore	42	14	38	9
2.	Bolangir	6	6	5	1
3.	Cuttack	12	180	75	97
4.	Dhenkanal	—	16	19	—
5.	Ganjam	—	36	11	20
6.	Kalahandi	3	11	8	1
7.	Keonjhar	—	1	3	3
8.	Koraput	—	11	13	20
9.	Mayurbhanj	2	10	21	9
10.	Phulbani	—	12	5	5
11.	Puri	—	30	18	10
12.	Bhubaneswar	11	30	40	83
13.	Sambalpur	2	4	18	11
14.	Sundergarh	3	8	13	12
15.	Rourkela	8	11	27	30
Total		89 (5.8)	380 (7.1)	314 (5.8)	311 (7.2)

Figures in parenthesis indicate the proportion of beneficiaries to the total beneficiaries.

of girls below 12 and in the age group 12-14 must have been held in good number and in 1981 the number of marriages in the age group of 10-14, stood at 6,820 among boys and 15,509 among girls. But what is more pathetic is that, in this age of early teens, 65 boys had become widowers and 138 girls widowed, besides 45 boys divorced or separated as against 284 girls in the same category. These are only about the known cases while the number of unrecorded cases is much higher. There are a whole range of social problems for girls being widowed, divorced or separated at the tender age. A boy can remarry without any difficulty. But a widowed girl is considered highly inauspicious, especially among those families

where child marriage is practised for the husband or the family if she tries to remarry. The problem of remarriage is slightly less difficult for divorced or separated girls. If it is extremely difficult for the tender age group girls to be remarried in the village surroundings, it is even more so for the girls in later teens (15-19 years), for, those older girls are, in all likelihood, also young mothers with some children. Remarriage of widowed, divorced or separated girls and women is very rare. There is a need to involve NGOs in educating the people on this aspect and to remove social inhibitions coming in the way of widow marriage.

8.16 Among the scheduled castes and scheduled tribes the old custom of levirate,

which enables a widow, sometimes also separated or divorced wife, to be remarried to the husband's younger brother, may be a good way out in such crisis. Statistics on this aspect are not available. A young widow with child and with prospect of remarriage is considered a heavy burden either at the husband's place or at her father's place. But at any place, there is every possibility of her being tortured and the child being under-nourished. Only in those rare cases where the child widows and separated or divorced girls are already educated in schools and are enabled to continue further education, the rigours of life may be mitigated, by taking a job, and thus improving their status in the family.

Social support

8.17 There are a number of schemes that provide social security to women-destitute, widowed and homeless to rehabilitate them on a firm footing. Most of these schemes are monitored through the State Social Welfare Advisory Board. The Mahila Mandals have been constituted to provide maternity and recreational facilities to women and children respectively. By 1985-86, there were 80 such centres in rural areas catering to 11470 beneficiaries. Children of work-

ing/ailing mothers aged 3-5 years are brought up in creches. About 1800 children, 43% of whom are females are looked after in 72 creche centres. The State Social Welfare Advisory Board funds a working women's hostel at Bhubaneswar for 50 working women. There are two more such centres in Cuttack. The Rescue Homes run by I.G. Prisons, Orissa, accommodate 25% of destitute women through rescue shelters. In addition, vocational skill training programmes are organized for the needy women through several training centres.

8.18 The Central Social Welfare Board (CSWB) has set up a Voluntary Action Bureau (VAB) in the state to combat atrocities on women and rehabilitate them in safe homes. As per the data available with the VAB, a total of 171 women have been registered for various problems arising out of marriage, sexual exploitation etc., from 1983 to 1988 (Table 8.5). The most common cases registered were harassment due to insufficient dowry leading to death. There were a large number of women reporting desertion by husbands. These women were not legally divorced as they were largely uneducated and more importantly, disliked the social stigma of being branded a divorcee. Cases of marital discord and domestic

TABLE 8.5
Cases Handled by VAB in Orissa

Sl. No.	Type of case	1983	1984	1985	1986	1987	1988	Total
1.	Marital Discord	6	8	2	2	5	5	28
2.	Domestic Violence	5	5	4	5	3	3	25
3.	Rape	2	—	3	—	—	1	6
4.	Emotional & Sexual harassment	2	8	—	3	1	3	17
5.	Dowry harassment	10	12	9	5	2	9	47
6.	Others	6	5	6	16	5	10	48
Total		31	38	24	31	16	31	171

Source : Voluntary Action Bureau, SSWAB, Bhubaneswar.

TABLE 8.6
Districtwise Distribution of Cases Registered

Sl. No.	Name of districts	1983	1984	1985	1986	1987	1988	Total
1.	Cuttack	13	14	6	14	5	13	65
2.	Puri	9	19	11	10	6	9	64
3.	Balasore	3	—	2	1	3	1	10
4.	Mayurbhanj	2	—	—	—	—	—	2
5.	Sambalpur	1	2	1	1	1	3	9
6.	Dhenkanal	1	1	—	3	—	1	6
7.	Bolangir	1	1	—	—	—	1	3
8.	Kalahandi	—	—	1	—	—	1	2
9.	Sundergarh	—	—	—	—	—	—	—
10.	Ganjam	—	1	2	—	—	1	4
11.	Keonjhar	1	—	1	1	1	—	4
12.	Koraput	—	—	—	1	—	1	2
13.	Phulbani	—	—	—	—	—	—	—
Total		31	38	24	31	16	31	171

Source : VAB, SSWAB, BBSR

violence were next in order of importance.

8.19 The district-wise figures of VAB cases are presented in Table 8.6. It is observed that Cuttack and Puri report highest incidence of distressed women. This is not to imply that other districts are better off in terms of women's status. The major explanation behind this trend is the close accessibility of Cuttack and Puri to the VAB in Bhubaneswar. Moreover, as this region is relatively more conscious of the availability of such facilities, the number of cases reported is higher.

8.20 These cases, when referred to the VAB are, later taken up by the Family Counselling Centre (F.C.C.) located in three places in the state. Two of these centres are at Bhubaneswar while the third has been shifted to Sambalpur. The F.C.C.s are managed by a group of professionals who examine the cases and follow them up with counselling the clients and the immediate family. The F.C.C. attached to NISWASS, Bhubaneswar, had counselled 17 such cases since inception.

A broad profile of the respondents show that 9 of the 17 cases registered were below 25 years of age. Of the remaining 8, only 1 person was aged 76. More than 94% of them were women clients (16 of the 17). The major problems reported by these clients were desertion by husbands leading to disruption in family life and need for financial independence. The F.C.C. has offered job counselling and vocational training to the needy clients. Thus the VABs are trying to put in some effort at reassuring women in need and providing social support. It would be useful to increase awareness of the facilities among the population and set up more branches in key locations. For shortage of funds, these programmes touch only the proverbial tip of the iceberg. The recorded cases of handicapped/destitute/helpless women is but a small fraction of the total female population in need. It is necessary to devise schemes appropriate and relevant to the situation if any meaningful impact is envisaged.

CHAPTER IX

Education

The backdrop

9.1 The New Education Policy (1986) spelt out two major goals for education (i) Universalization of primary education, (ii) Eradication of adult illiteracy. These concerns are not new, but added emphasis is being laid and time-bound programmes evolved to achieve the objectives.

Among the States, Orissa ranks 13th in terms of the literacy rate. This is an improvement over 1971 when the state occupied the 15th position. The adult literacy rate for Orissa for population above 15 years constitutes 38.8% of the relevant population.

Literacy in districts

9.2 There is a close nexus between literacy and economic development of an area. Literacy is low in economically backward districts. Among the districts of the state, the literacy rate varies from as low as 16.1% in Koraput to 45.5% in Puri. Five districts in the state are above state average literacy rate. Of these five districts three are in the coastal tract which are also the most advanced areas of the state. Three districts, Ganjam, Keonjhar and Sambalpur report more than 30% of its population to be literate. The third category of districts with 25%-30% literacy include Bolangir, Mayurbhanj and Phulbani. The most backward districts are Koraput (with more tribal population) and Kalahandi (a severely

drought prone district) with less than 20% literate population (Table 9.1). Koraput comprises of backward tribal groups like the Kondhas, Parajas, Koyas, Godabas, while Mayurbhanj has relatively more advanced tribes who have accultured modernity more than elsewhere in the state. Therefore in spite of Mayurbhanj having the largest tribal population in the state its position with regard to literacy is not as bad as Koraput.

9.3 Between sexes, the pattern of male literacy in the districts is by and large consistent with the state. But in case of female literates, only two districts, Cuttack and Puri record higher proportion of literacy than the state. The districts of Koraput, Kalahandi, Phulbani and Bolangir have about a tenth of their female population recorded as literates. These four districts also account for wide disparities between sexes in the literacy rate. A similar pattern is observed among ST/SC women between districts.

9.4 A glance at the 1981 census figures show that while 34% of population are literate, there are around 42% of population who are barely literate. The term barely literate refers to those who can read and write but have not been formally educated. This constitutes a hard crust of society who have to be considered while promoting adult literacy programme. Of the rest, majority have attained primary school level. The proportion in different levels of education

TABLE 9.1

Literacy in Orissa - 1981

(% of population)

District	Male	Female	Total
Balasore	55.58	28.30	42.08
Bolangir	39.89	11.28	25.63
Cuttack	58.12	32.38	45.43
Dhenkanal	57.61	21.58	36.89
Ganjam	45.93	17.05	31.27
Kalahandi	31.23	7.73	19.42
Keonjhar	43.06	17.21	30.22
Koraput	23.68	8.56	16.14
Mayurbhanj	37.48	13.85	25.73
Phulbani	42.62	11.45	27.06
Puri	59.26	31.17	45.50
Sambalpur	47.76	19.56	33.84
Sundergarh	47.33	24.19	36.17
Orissa	47.10	30.56	34.23

Source : Census of India, 1981.

goes down as the literacy level increases and only 8.4% report to be matriculates. In all these levels, the relative position of women is low with 45% barely literate, 31% up to primary level and hardly 5% matriculates (Table 9.2).

Disparities in literacy

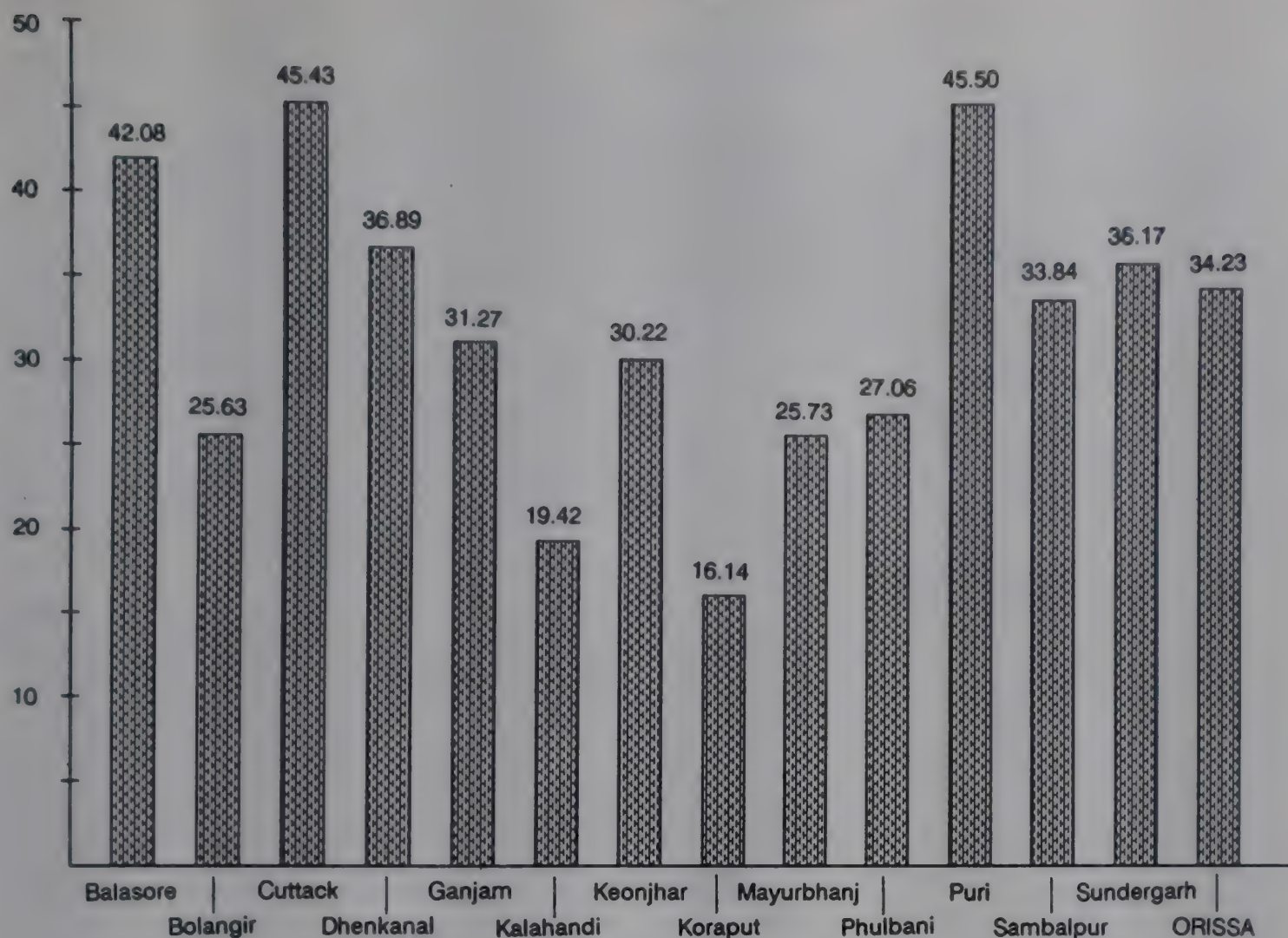
9.5 There are large scale variations in the patterns of literacy among areas, caste groups and sexes. Thus while the proportion of male literates is on par with the national average (46.9%), the literacy rate among females lags behind at 21.4% and is below the average for the country at 24.8%. Again the female literacy in rural areas, where majority of the people live, is less than half of that in the urban areas. In other words, while 18.5% of females in rural areas are reported literate, the proportion in urban areas is 42.7%. Male literacy too exhibits

glaring disparities between urban and rural areas. While Cuttack and Puri exhibit high proportion of SC female literacy, Sundergarh records the highest proportion among ST women. The proportion of literates among the ethnically backward groups is still worse with only 22.4% of the SC and 16.4% of STs reported to be literates. Here again, the female SC literacy is abysmally low at 9.4% while ST female literacy is 5%.

Literacy by age group

9.6 An analysis of literacy rates by age groups reveals an interesting picture. The age groups considered are : (i) 5 years and above, (ii) 10 years and above, (iii) 35 years and above. It is heartening to note that while 46.7% of males and 20.6% of females in rural areas are literate in India, the figures for Orissa are higher at 50.4% and 20.9% for population above 5 years. However in urban

Literacy in Orissa



areas, the all India figures of 74% and 54.4% are much higher than the figures for Orissa (73.2 and 49.1%). Thus while rural male literacy is much ahead of the all India level and even some neighbouring states, the rate among urban females is lower than the national average and that of West Bengal. The same trend holds true for the other age groups (Table 9.3, 9.4 and 9.5). Thus female literacy is a major problem to tackle in this state.

Pre-school Education

9.7 Schooling in Orissa usually starts with formal education imparted in the primary schools. However, it has been found that children in a majority of cases, are not willing to attend primary schools for several reasons. One major reason is that the child is completely accustomed and conditioned to home environment and reacts sharply to an alien environment. Hence pre-schooling helps to prepare the child for the entire formal education that follows after the age of

6 years.

9.8 The need for pre-school education is particularly important in Orissa mainly due to the presence of a large proportion of children who hail from the culturally and socio-economically disadvantaged strata. The Fifth Educational Survey of Orissa (1987-88) estimated the total child population 4-6 years as 12.80 lakhs which constitute nearly 15% of total child population of the state. There were a total of 4911 pre-primary educational centres (anganwadi/balwadies etc.) in both rural and urban areas of the state in the same reference period (5th survey). Thus a pre-primary centre catered to a catchment population of around 260 children. Reports from 75 of the 105 ICDS blocks in the State place the number of anganwadis at 6232 as on 30th June '89 catering to pre-school needs of 171490 children, 3-6 years of age. The pre-primary centres consisted chiefly of Balwadi (BW) and Anganwadi (AW) run through the ICDS project authorities. The number of pre-

TABLE 9.2

Level of Education in Orissa by Sex, 1981

Sl. No.	Particulars	Male	Female	Total
A.	Literate	47.1	21.1	34.2
i)	Literate (without education)	40.3	44.9	41.8
ii)	Primary	26.6	30.8	27.9
iii)	Middle	19.6	17.6	19.0
iv)	Matriculation	9.7	5.3	8.4
v)	Non-technical diploma	N	N	N
vi)	Technical diploma (non equal to degree)	1.0	0.3	0.8
vii)	Graduate (other than technical degree)	2.8	1.1	2.1
B.	Illiterate	52.9	78.9	65.8
	Total A + B	100.0 (13.31)	100.0 (13.06)	100.0 (26.37)

(Figures in Parentheses indicate population in million)

Source : Census of India, 1981.

primary schools and those attached to primary schools, were few and far between (Table 9.6). An analysis of the enrolment in pre-school centres since 1976-77 shows that there has been a manifold increase, particularly after 1980-1981. While there were

2477 children in 1976-77, the figure had increased to 2,60,493 in 1987-88 according to an ICDS evaluation report of CD Department (Table 9.7). The proportion of children attending to those enrolled in these AW centres had increased from 71% in 1976-77

TABLE 9.3

Literacy Among 5-9 Year Age Group

(In %)

State	Rural		Urban	
	Male	Female	Male	Female
Orissa	50.41	20.96	73.29	49.13
Bihar	39.61	11.80	70.33	46.00
A. Pradesh	36.74	16.02	16.02	47.20
M. Pradesh	38.10	10.47	73.11	48.64
W. Bengal	46.98	25.31	75.10	60.64
India	46.74	20.65	74.00	54.41

Source : Census of India, 1981.

TABLE 9.4

Literacy Among 10-34 Years Age Group

(in %)

State	Rural		Urban	
	Male	Female	Male	Female
Orissa	54.46	21.32	77.06	50.12
Bihar	42.97	11.77	73.48	46.61
A. Pradesh	38.15	15.56	72.92	47.33
M. Pradesh	41.87	10.64	77.47	50.11
W. Bengal	54.33	26.65	77.74	62.44
India	50.08	20.86	77.31	55.43

Source : Census of India, 1981.

TABLE 9.5

Percentage of Literacy by Age Group 35 Years and Above

State	Rural		Urban	
	Male	Female	Male	Female
Orissa	46.46	8.50	69.60	29.65
Bihar	32.03	4.91	66.05	28.48
A. Pradesh	29.73	7.37	64.17	28.10
M. Pradesh	28.92	3.29	66.98	28.49
W. Bengal	48.44	11.48	73.47	47.21
India	37.96	8.62	69.42	35.91

Source : Census of India, 1981.

to 84% 1987-88 during the decade under reference. Thus there has been an awareness of the need for pre-school education in the

ICDS project areas. However when compared to the total child population in the state, the pre-school centres cover only one-

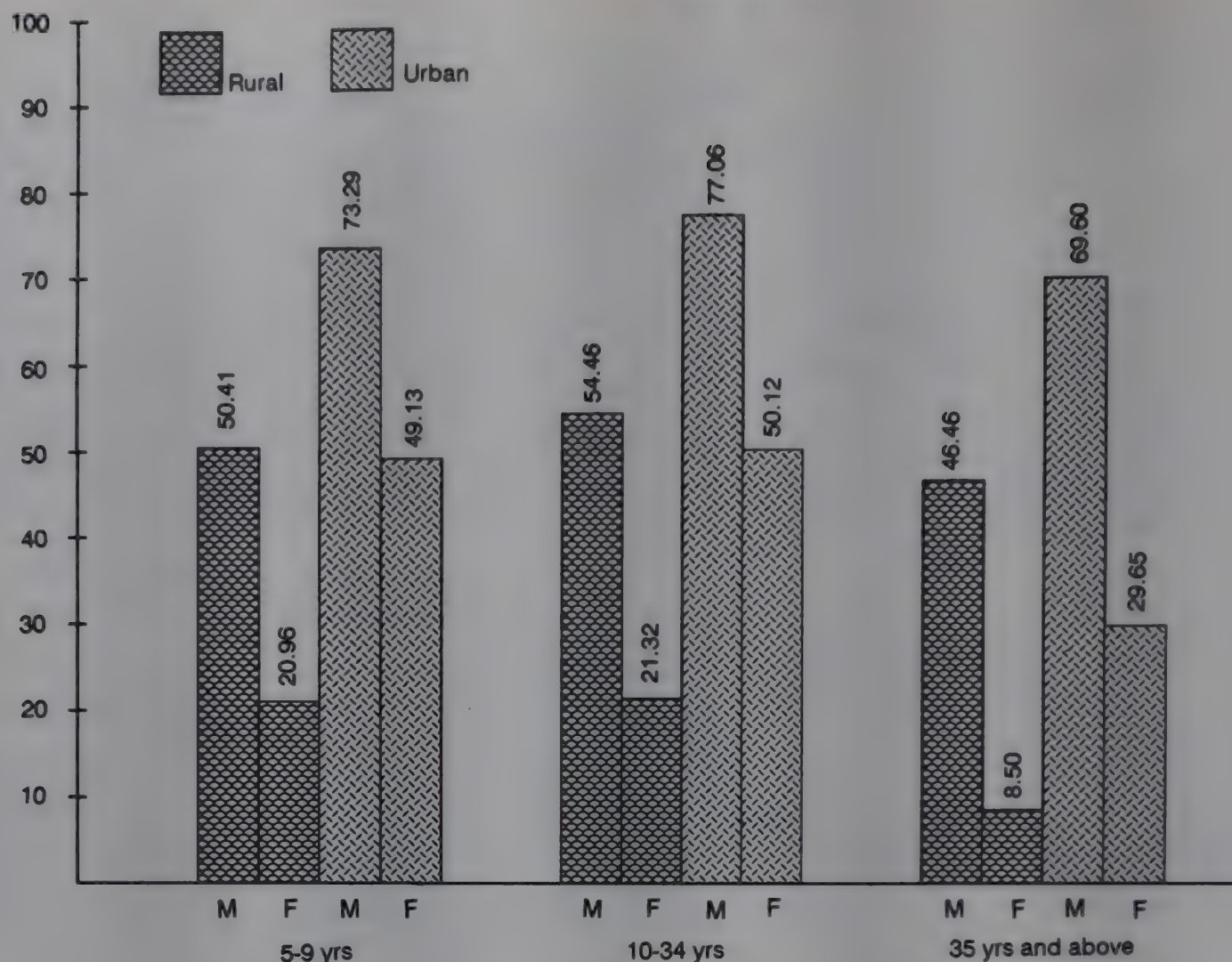
TABLE 9.6

Pre-primary Educational Facilities

Type of facilities	Rural		Urban	
	No. of villages having facilities	No. of institutions	No. of towns having facilities	No. of institutions
1. Balwadi/ Anganwadi	4018	4557	10	118
2. Independent Pre-primary schools	107	108	4	10
3. Pre-primary stages attached to schools	82	82	9	36

Source : Fifth Educational Survey Report, 1987-88.

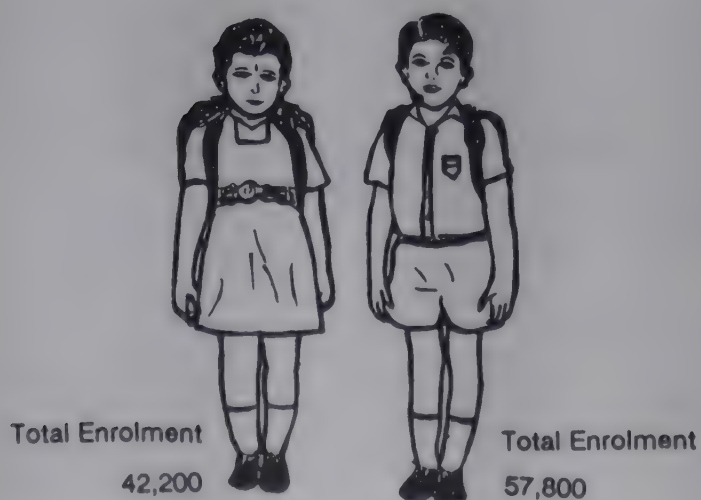
Percentage of Literacy



fifth of the eligible children. Thus as much as 80% of the children are still outside the ambit of the learning process. With nearly 40% of the total population of the state classified as SC/ST, the socio-economically disadvantaged children from these families

require the utmost priority in preparation for their education in the future. Complementary approaches have been suggested in pursuit of this aim like experimental models for non-formal pre-school education, common facilities for primary schools and day care centres, expansion of existing facilities of pre-school education including ICDS and other balwadis and large scale training programmes for pre-school education workers. Both the government and voluntary agencies are expected to play a significant role in this endeavour.

Enrolment in Primary School



Primary education

9.9 According to the Fifth All India Educational Survey 1986, there were 46,527 inhabited villages and the number of rural habitations identified was 69,530 in Orissa. On an average there were 1.5 habitations for each inhabited village. Out of 69,530 such habitations, primary education facilities were

TABLE 9.7
Non-formal Pre-school Education

Year	No. of students		% of enrolled students
	Enrolled	Attended	
1976-77	2477	1755	70.8
1977-78	2137	1591	74.5
1978-79	3916	3401	86.8
1979-80	17900	14663	81.9
1980-81	19757	16086	81.4
1981-82	26947	21074	78.2
1982-83	50983	43252	84.8
1983-84	78318	70642	90.2
1984-85	98534	85355	86.6
1985-86	172140	144956	84.2
1986-87	226055	188395	83.3
1987-88	260493	218821	84.0

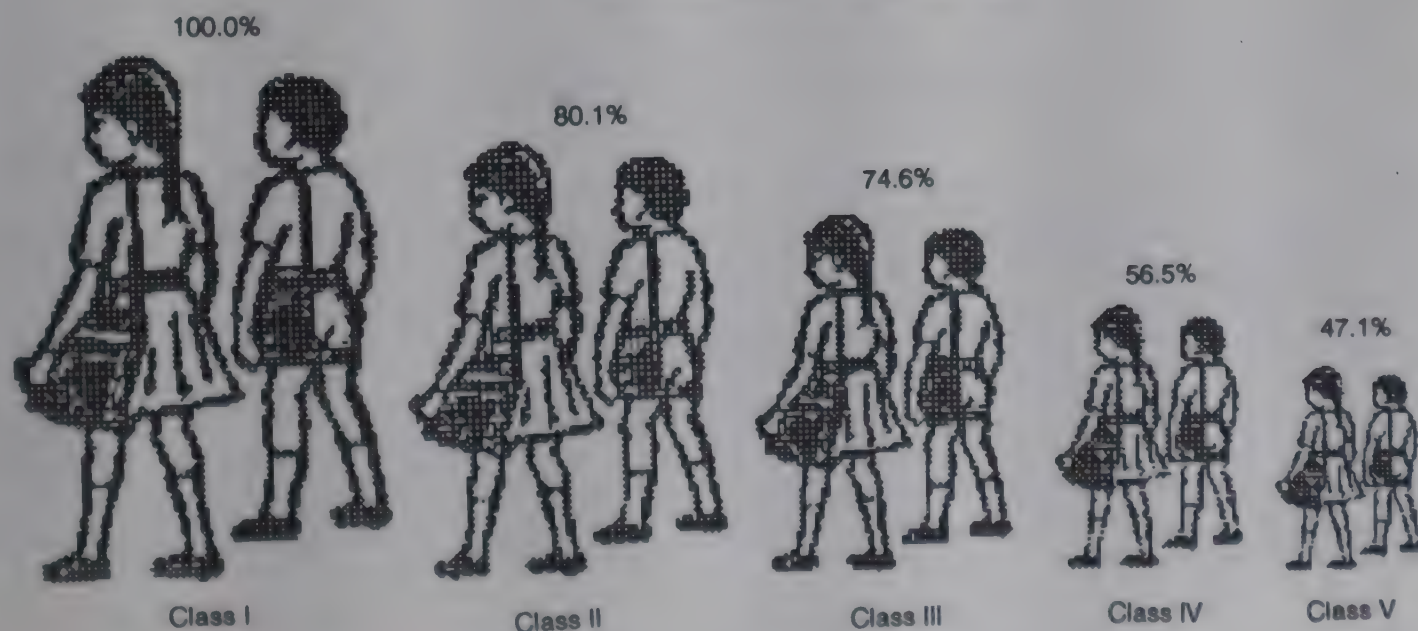
Source : ICDS Evaluation Report, Dept. of Panchayatiraj, Govt. of Orissa

available within 34,770 (50 per cent) habitations covering 77.08 per cent of rural population. In addition to the above, 10,286 habitations (14.79%) had schools within a distance of 0.5 km and 10,462 (15 per cent) habitations within one km. Thus as many as

20.15 per cent rural habitations did not have primary schooling facilities within a distance of one km.

9.10 The proportion of children in the age group 6-11 years is estimated to be 34.52

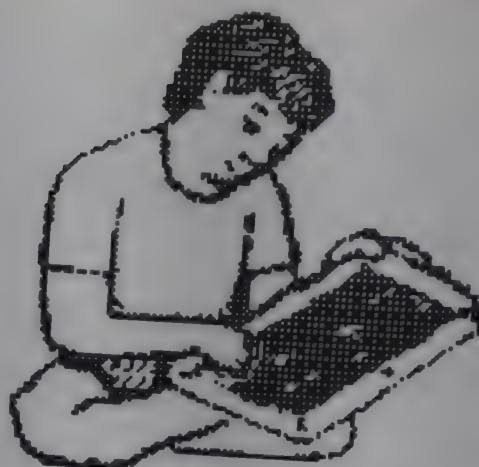
Retention in Primary School



Non-formal Pre-school Education

1976-77

No. of students enrolled	- 2477
No. of students attended	- 1755
Percentage of enrolled students	- 70.8



1987-88

No. of students enrolled	- 260493
No. of students attended	- 218821
Percentage of enrolled students	- 84.0

lakhs which constituted 12.01% of child population. According to the 5th Educational Survey the gross enrolment ratio for the age group 6-11 years was 96.24. The age specific enrolment ratio for age group 6-11 years was 73.67. Further there are significant differences between sexes in both rural and urban areas. Thus while 45.67% of the girls are enrolled in primary schools in the urban areas, the same in rural areas is 41.61%. The position among SC and ST groups is still lower with 39.94% of SC and 36.5% of ST girls enrolled in primary classes (Table 9.8). These figures are higher when compared with the Fourth Educational Survey report of 1982, when girls enrolment in primary schools was 39.9% for all communities, 34.3% for SCs and 30.9% for STs. When the total enrolment for Class-I-XII is considered,

boys constitute more than 60%, while girls account for the rest. Thus girls are disadvantageously placed with regard to the education system.

The enrolment in the non-formal sector is also discouraging with a meagre 3% of children enrolled for the primary level.

9.11 Out of every 100 boys and 100 girls who are enrolled in Class-I in the rural areas, only 48 boys and 40 girls remain in Class-V. Thus around 52%-60% of the children dropout at various stages in the rural areas. However in urban areas, the picture is just the reverse with 76% of the boys and 74% of girls still in Class-V. Thus the task of universal enrolment at primary education level is really arduous, especially in the rural areas (Table 9.9).

TABLE 9.8
Enrolment in Primary Schools

Area	Total ('000)		SC		ST	
	Boys	Girls	Boys	Girls	Boys	Girls
Rural	58.4 (1705)	41.6 (1215)	60.3	39.7	63.8	36.2
Urban	53.2 (207)	46.8 (182)	57.6	42.4	58.3	41.7
Total	57.8 (1912)	42.2 (1397)	60.1	39.9	63.5	36.5

Source : 5th Educational Survey.

TABLE 9.9

Retention in Primary School

(% of enrolment in class I)

Area	Class	Boys	Girls	Total
Rural	I	100.0 (473005)	100.0 (364967)	100.0 (837972)
	II	80.1	75.5	78.1
	III	75.5	68.8	72.6
	IV	57.5	49.0	53.8
	V	47.6	39.6	44.1
Urban	I	100.0 (48666)	100.0 (40507)	100.0 (89173)
	II	98.2	99.1	98.9
	III	92.0	94.9	93.0
	IV	81.2	82.1	81.6
	V	76.0	74.2	75.2
Total	I	100.0 (521671)	100.0 (405474)	100.0 (927145)
	II	81.8	77.9	79.8
	III	77.1	71.4	74.2
	IV	59.7	52.3	56.5
	V	50.2	43.1	47.1

Source : 5th Educational Survey Report, 1987-88.

N.B. : Figures in parenthesis indicate the enrolment in Class I.

Higher and Secondary Education

9.12 The proportion of older children (above 11 years) is 30.6% as per the Fifth Educational Survey. For obvious reasons the proportion of enrolment is lower in this group than among primary school-going

children. Around 29% of the children aged 11 years or older are enrolled in Classes VI upwards. Among the students enrolled, more than 63% are boys. Thus there are fewer girls studying above primary level. This discrepancy is uniformly observed both for rural and urban areas (Table 9.10).

TABLE 9.10

Enrolment in Secondary & High Schools (Class VI-XII)

Area	Boys ('000)		Girls ('000)		Total ('000)	
	No.	%	No.	%	No.	%
Rural	591	64.1	331	35.9	922	100.0
Urban	171	60.4	112	39.6	283	100.0
Total	762	63.2	443	36.8	1205	100.0

Source : 5th Educational Survey.

COMMUNITY HEALTH CELL
326, V Main, I Block
Koramangala
Bangalore-560034

9.13 If the retention at primary stage is around 50% in the state, the rate declines to 20% in the secondary stages and further reduces to negligible proportion in the higher secondary stage (Class XI and XII). As may be seen from Table 9.11 only 24% of the boys and 16% of girls enrolled in Class-I, complete Class-X. The situation is

still worse if one considers the +2 system. Here again the rural-urban ratio is one to more than three. The differential among girls is more glaring with one girl from the rural areas for more than four girls in the urban areas enrolled in Class-X. This largely speaks of the volume of efforts needed to bridge the gap between the sexes and areas.

TABLE 9.11

Retention in Secondary School

(% of enrolment in class I)

Area	Class	Boys	Girls	Total
Rural	I	100.0	100.0	100.0
	VI	35.4	26.9	31.3
	VII	31.0	22.3	27.2
	VIII	28.1	17.0	23.3
	IX	24.8	13.5	20.0
	X	20.6	11.9	16.9
	XI	N (0.03)	N (0.03)	N (0.03)
	XII	N (0.03)	N (0.03)	N (0.03)
Urban	I	100.0	100.0	100.0
	VI	75.6	66.7	71.5
	VII	70.4	62.5	66.8
	VIII	77.5	64.5	71.6
	IX	67.1	49.4	59.1
	X	58.5	47.2	53.4
	XI	1.3	0.8	1.1
	XII	1.1	0.8	0.9
Total	I	100.0	100.0	100.0
	VI	39.1	30.0	35.1
	VII	34.7	26.3	31.0
	VIII	32.7	21.8	27.9
	IX	28.7	17.1	23.6
	X	24.1	15.5	20.4
	XI	0.1	0.1	0.1
	XII	0.1	0.1	0.1

Source : 5th Educational Survey.

Constraints to learning

9.14 The differentials between areas, sexes and ethnic groups are a consequence of age-old attitudes towards education, the domestic environment and above all, the overriding poverty of the households. In a study conducted on factors affecting learning opportunities of tribal children in Orissa by ORG, five essential factors were held responsible for dampening the interest of children in attending schools. They are (a) physical health, (b) socio-economic conditions, (c) domestic environment, (d) attitudinal issues, (e) administrative and service delivery systems. On account of these factors, every second child in primary school discontinued reading after Class-I. The proportion of dropouts was higher in Koraput (72.7%) than in Cuttack (33.3%). Lack of interest in studies was the major reason for the dropout (ORG, 1989).

9.15 In the same study the leftouts who had never entered the formal schools constituting 13.5% of the total child population were also contacted. The major cause for remaining leftout is reported to be the dire poverty of their parents compelling them to work at home or help the family in income generation activities.

9.16 The socio-economic factors apart, the teacher plays a very vital role in educational process. The number of teachers posted to school and the pupil strength are important determinants of the efforts to promote education. The Fifth Educational Survey points out that on an average, a teacher has a pupil strength of 39.5 (Table 9.12). The ratio is highest (41.3) among the secondary schools and declines gradually to 38.8 at the primary level. But in tribal areas where the socio-cultural patterns of living are distinctive there is an urgent need to post more teachers preferably from the same area to reach out to the children who may never attend schools. At least this will ensure covering the target population. Among other incentives, housing must be provided to the teachers in the villages.

9.17 Improvement in the quality of education is also dependent on the infrastructural

support (like school buildings, water, sanitation, electricity, chair/tables, black boards, books, etc.). A study of the tribal children's learning opportunities conducted by ORG in 1989 has found that primary schools in

TABLE 9.12

Teacher-Pupil Ratio

Level of education	Teacher-Pupil ratio
Primary	38.1
Secondary & High School	41.3
Average	39.5

Source : 5th Educational Survey.

Koraput and Phulbani have only one teacher while in Cuttack, the average works out to 2.5. The former two districts are tribal dominated while Cuttack is in coastal region. Thus the relatively advanced regions have better educational facilities than those which are backward economically, socially and culturally.

Adult Education

9.18 One of the major goals for education in 1990s is the removal of adult illiteracy. The proportion of adult illiterates to the population aged above 15 years is 61% in Orissa. The total population to be covered by literacy programme in the state is large and facilities available are meagre. According to the Fifth Educational Survey, only 10% of the villages in the state have an adult education (A.E.) centre. Further the availability of the facility is inversely proportional to the size of the villages (Table 9.13). Thus while more than 90% of small villages (less than 500 population) are not served by an A.E. centre, the proportion declines to 86% of villages above 2000 population. Moreover, the number of villages with centres for both men and women bear direct relationship with size group of villages. Hardly 16% of villages with 500 population have common centres, while the same rises to 36.5% among

TABLE 9.13

Villages According to Facility for Adult Education (Functional Literacy)

Population	Villages with centres	Villages with centres for			
		Men	Women	Both	Total
2000 and above	12.7	61 (27.5)	80 (36.0)	81 (36.5)	222 (100.0)
1000 to 999	12.3	252 (39.3)	231 (36.1)	158 (24.6)	641 (100.0)
500 to 999	12.0	495 (40.2)	485 (39.3)	253 (20.5)	1233 (100.0)
Below 500	8.9	1355 (51.7)	830 (31.7)	437 (16.7)	2622 (100.0)
Total	10.1	2166 (45.9)	1626 (34.4)	929 (19.7)	4721 (100.0)

Source : 5th Educational Survey Report

N.B. : Figures in parenthesis indicate proportion to the total

villages with population 2000 and above. The centres exclusive for women are also more in the bigger villages. As the larger sized villages usually are found in the coastal tract, the inhabitants get the benefit of adult

education. The vast majority of illiterates who hail from the western districts of Orissa are not touched by these facilities. This calls for serious rethinking on the policy of location of the A.E. Centres.

CHAPTER X

Role of Voluntary Organizations

Voluntary movement in Orissa

10.1 Voluntary work in Orissa was initiated by the Christian missionaries. The missionaries concentrated on the tribal areas of the state and emphasised upon provision of education and health services. Inspired by the preachings of Mahatma Gandhi and Vinobha Bhave, constructive voluntary activities were undertaken by the NGOs in the state as part of such institutions spear-heading national movement till late seventies. Initially the focus was on welfare oriented work such as orphanages, old age homes, etc. However gradually, the orientation and focus shifted towards development. Besides that Gandhian and Sarvodayee institutions, alternative development initiatives, mainly by the middle class youth emerged. The growth of voluntarism (other than the Missionaries, Gandhians and Sarvodayees) is a relatively recent development. Most of the organizations are relatively new, hardly a decade old, and came into being in the early eighties. In fact there has been a proliferation of agencies in this decade.

Profile of NGOs

10.2 According to the Registrar of Societies in the state, the number of voluntary organizations, services and recreation clubs in Orissa count in thousands; but other estimates including that of ORG put the number of voluntary organizations in Orissa

around 300. The distribution of these organizations are not proportionate — while tribal districts like Koraput and Phulbani and coastal districts like Ganjam, Puri, Cuttack and Balasore have many voluntary organizations. Bolangir and Sundergarh districts have very few. Out of the 300 organizations, roughly 10, 50, 80 and 160 are Hospitals, Dispensaries, Social Action Groups and Service Clubs respectively.

General observation

10.3 In terms of programmes many voluntary agencies are involved in creating awareness among people regarding government development programmes and in enabling under privileged group to take advantage of these programmes. Besides this, many voluntary organizations are implementing government schemes. In fact, Orissa is one of the states, in which the NGOs have been involved in a major way in Government programmes. In the work of larger, well-organized NGOs with clear perspectives regarding people's involvement, implementation of government programmes is more efficient and there are creative innovations in the programme. The probability of reaching the target groups is higher. However, there is also the situation where some of the voluntary organisations do not have any creative programmes of their own and implement government programmes without

heed to relevance of such activity for the local population.

10.4 The programmes in which most NGOs have been both creative and effective are the development of alternative energy sources (bio-gas), social forestry and environmental work. The areas in which NGO involvement is poor include health and services for handicapped. Traditionally, these activities have been major areas of work of NGOs elsewhere in the country. Similarly, institutionalized services for destitute women, old people and orphaned children are inadequate and poorly organized. Very few NGOs have concerned themselves with these problems.

10.5 Many agencies have education programmes either for adults or for children. In the absence of clearly articulated objectives and well-designed curricula there is a great deal of rhetoric regarding awareness and education. Very little documentation can be found regarding the impact of such programmes either in terms of literacy acquisition or awareness generation. This becomes an area of concern given that the adult and non-formal education programme of the government of Orissa has been handed over to NGOs for implementation. (Nearly 84 organizations all over Orissa are involved in the government's non-formal education programme). This lack of documentation is evident in most other NGO activities, though a number of NGOs list this as one of their main objectives.

10.6 There is inadequate information and appreciation of the issues relating to women development. Firstly, very few projects are working with women. Secondly gender concerns remain unexplored. An absence of such an analysis has led to marginalization of women's role in development. The women's programmes are few and far between and appear as if designed to gain donor support. When projects say that they are working for people's participation they generally mean 'men'. Very few organizations of women exist and the people's organizations operate with the same gender biases as elsewhere.

10.7 The emphasis of work has been on

the tribal population as is evident from the choice of target group made by the voluntary organizations. This emphasis has resulted in the voluntary movement being able to create greater visibility regarding the issues of tribal marginalization and can be considered an important contribution of the movement.

10.8 Many of the social action groups play a vital role in imparting health education and in disseminating health information and thereby encouraging and organizing the poorer community for better health practices, hygienic environment, low-cost nutritious food, safe drinking water etc. There are about five organizations having balwadi centres; more than 20 organizations who organize women for economic activities; quite a few organizations motivate for the family welfare programme; only a few organizations are involved in the immunization programme; and five other organizations have school health programmes.

Health sector

10.9 In the health sector, the traditional healer family had the responsibility of health care of the community. In the recent past, during the colonial period, benevolent Christian Missionaries started sharing their medicare facilities with their servants, colleagues and neighbours out of compassion and later on charitable dispensaries and hospitals were established. Hospitals were mostly established during the late forties and early fifties by the protestant group of churches. They are hardly ten in number and are situated in the remote tribal areas of Ganjam, Koraput, Phulbani, Sambalpur, Kalahandi and Sundergarh districts.

Clinics and dispensaries are also mostly found in tribal areas but are scattered in all the districts of Orissa except Dhenkanal and Bolangir. These are mostly run by catholic church groups and will be around fifty in number and have come into existence mostly during fifties and sixties.

In addition to these, there are a number of organizations directly or indirectly involved with health and development of people.

10.10 Although a number of organizations operate in the field of health care, there is very little understanding in the NGO sector regarding the basic issues and problems of health care delivery in predominantly, rural and poor populations. For example few organizations are aware of the priorities of preventive health care and the delivery models to operationalize these strategies. The training of health workers and traditional midwives is an accepted and well worked out concept in NGO work in some states, whereas these have not been developed in Orissa.

10.11 In the context of Orissa, voluntary health services which have some contribution towards women's and children's health and their development can be divided into four categories :

- a) Specialized Community Health Programmes - which are decentralized, low-cost, community based health programmes giving importance on and promoting local level village health workers, prevention of disease, health education and community involvement. Innovative efforts on this line have already been seen in a couple of organizations and their success has to be witnessed.
- b) Integrated Development Programmes where health is a part of the overall development activity with or without any specific thrust on health is the common trend in Orissa. There are several organizations in this category and many more are coming up.
- c) Health Care for special groups of people are mostly by specialized agencies like orphanages, rehabilitation centre for handicapped people, destitutes and leprosy patients. Earlier hardly any government infrastructure existed for this kind of health care and only voluntary organizations were in existence. However, a number of organizations have stopped functioning, a few were taken over by the government (for example - Hatibadi Leprosy Rehabilitation Centre). Most of these organiza-

tions are either religious or quasi-religious in nature.

- d) Centralized Health Care Programmes are based on treatment of diseases and are still many in numbers such as hospitals and clinics. However, some of these organizations are now opting towards community health services. Quite a few of these have modern infrastructure and are well known for their services.

Future role

10.12 In meeting the challenge of development of women and children, communication is one of the most important ingredients. Mass media systems are available at a level that was never before but are largely with the government channels which need to be activated by the government to the maximum. But face-to-face contact and a two way communication is far more important than the mass media channel. Here the voluntary sector can play a vital role. Studies have shown that voluntary organizations have some positive aspects viz., they are close to the people, responsive to their needs, able to act quickly, can operate cost effectively, usually are innovative and flexible and the bulk of basic services especially in remote and underserved areas are provided by them. However, the task is gigantic. Their scope of work can be broadened to include sectors which have a direct bearing on the people's development such as education, agriculture, animal husbandry, housing, water, nutrition, immunization, etc.

10.13 Considering the development situation of Orissa, the role of voluntary organizations in the development of women and children can be :

- 1) The most important role a voluntary agency can play is to supplement or complement the government effort when and wherever needed. Remote areas where the governmental programmes do not exist can be reached by voluntary agencies.
- 2) Regarding governmental programmes, information and understanding can be imparted to people by voluntary

agencies to motivate them for better involvement and effective implementation.

- 3) Recognition, review and restoration of local/traditional health practices.
- 4) Training of village development workers, traditional birth attendants and the women.
- 5) Importance of immunization, diarrhoea management, breast-feeding, weaning, growth monitoring, pre-natal and post-natal care, nutritious/balanced/local/low-cost food, safe drinking water, environmental sanitation, healthy practices and exercise, etc. can be highlighted and made understood at village level. Accordingly comprehensive activities within the competency of the community can also be organized with their initiative and involvement.

10.14 In conclusion, voluntary organizations operating in Orissa are few in number and their activities are very much limited and localized. However, they have the potential of playing a more important role, specially in the area of women and child development activities. No doubt, the Seventh Plan has envisaged a big role for such organizations and they have taken up multiple development programmes in a fairly intensive way. But in the next decade they have to operate more extensively specially in vulnerable areas and for underprivileged groups like women, children, scheduled castes and scheduled tribes. In order to improve their efficiency, a constant monitoring and evaluation of their working is needed. This would help in checking the pilferages if any and also to make them more effective in reaching the people.

CHAPTER XI

Areas of Concern

The areas

11.1 The analysis thus far relates to the situation of women and children in the development arena which directly or indirectly influences the growth process. Besides these, there are wider issues of concern. These common concerns of the child and its mother are the results of interplay of a host of factors. Some of these key concerns relating to child development having repercussions on other related sectors are :

1. Urban slums
2. Housing
3. Drinking water
4. Sanitation
5. Ecology

Urban slums

11.2 With increasing urban population, the number of people living in distress, deprived wholly or partially of basic amenities has increased phenomenally. The growth rate of population living in poor conditions in urban slums is substantially higher than the overall growth rate of urban population, mainly due to the influx of rural poor to the towns and cities in search of economic opportunities.

This additional increase causes a strain on the existing resources (land, buildings, drinking water, food and employment) thereby leading to deprivation and distress. Ac-

cording to estimates by the Task Force on Housing and Urban Development nearly 3 lakh persons in the state live in urban slums by 1981 and their number was expected to increase to 10.6 lakhs by 1990. Further the proportion of slum dwellers was also expected to rise from a mere 9% of the total urban population in 1981 to 20% by 1990. This only indicates the growing magnitude of the problems to be tackled for the slum population in the nineties.

11.3 The conditions of the urban poor are in many ways as bad as those of their rural counterparts and may be even worse off. They are in greater distress on account of the following :

- 1) They have often no supporting family members to help them in times of need.
- 2) They live in overcrowded and congested and environmentally hazardous surroundings thus inviting diseases.
- 3) They are forced to migrate from one part of the town to another looking for work and hence have no base.
- 4) They are unorganized socially, economically and politically.
- 5) They are prone to various types of accidents, poisoning, road accidents, and factory hazards.

11.4 The situation of women and children in urban slums is worse than others as they are the first victims to suffer and in extreme cases, to die from such adverse conditions.

In the absence of extended family support which rural environment often provides, the urban children become vulnerable.

11.5 Information on slum dwellers' situation in the state is inadequate to draw any general conclusion. However the profile of urban slums in Cuttack and Sambalpur prepared by ORG provide good insight into the slum conditions. According to the report, Cuttack town had 35 slums with more than 1/3 of the towns' population living in them.

11.6 Majority of the inhabitants of these slums were settled there since 75 years. The major occupations pursued were government service in low cadres, petty trade or rickshaw pulling. The living conditions were far from satisfactory. More than two-thirds of the population faced scarcity of drinking water. The health status was very poor with high incidence of malaria and skin diseases as also diarrhoea. The immunization coverage was poor with hardly one-fifth of the children getting immunized against polio. The proportion rapidly dwindled for the subsequent doses. The immunization for DPT and BCG exhibited similar trend. More than 80% of the children and pregnant mothers were not protected from communicable diseases. Only less than two-fifths of the expectant mothers received anti-natal care while the rest expressed either ignorance of such facility or unaffordability to bear the expenses. In a large majority of cases (73%) the women delivered children in their own house with the help of neighbours/relatives.

11.7 Given the above conditions, it is not surprising to note that nearly 80% of the children in these slums are malnourished. The severely malnourished children (Grade III & IV) constitute nearly 36% of children surveyed. When the standard weights for age are compared with the actual weights of the children in all age groups there are large number of under weight children.

11.8 Sanitation in these slums is bad with less than one third having access to latrines of their own. The streets are not cleaned regularly and the waste is strewn all around the houses. More than 70% of the households reported waterlogging during the rainy

season. The incidence of water-borne diseases under these conditions tends to increase.

11.9 Half the population in the slums are illiterate with no pre-schooling facility. In many slums, there is no primary school and functional literacy classes are absent.

11.10 The housing conditions are very depressing in the slums. Most of the slum dwellers are squatters with an average per capita living area of 36 sq.ft. The houses are mostly small huts with thatched roofs and consist of one living room. Ventilation is poor and there is no separate kitchen. A negligible proportion of houses are electrified.

11.11 The economic status of slum dwellers is appalling with majority of the households not able to meet the minimum need of survival. The fact that there is only one worker for every four dependents shows the magnitude of dependency.

11.12 Under the Urban Basic Services Scheme (UBS) for development of 25 town projects during the Seventh Plan period, efforts are being made to enhance the survival and development of children and women from the poor urban families. The expenditure is shared by the Centre, the State and UNICEF.

11.13 The UBS programme in the state covers 25 towns with a population of 13.55 lakhs, of which the target population is 4.45 lakhs. The townwise details of total population and the target population are given in Table 11.1.

11.14 The two important and distinctive features associated with the UBS are

- 1) Community participation
- 2) Convergence of basic services

Under the former, the programme envisages to involve community in all stages of the project from planning, implementation, monitoring to evaluation. For this purpose neighbourhood groups comprising 20-25 households will be formed to chalk out development plans. The basic services that are intended to be provided for slums are

- 1) Primary Health Care
- 2) Women's Economic Upgrading

TABLE 11.1
UBS Programme

	Total Population (lakhs)	Target Population (lakhs)
Cuttack	3.20	0.94
Sambalpur	1.10	0.31
Burla	0.11	0.04
Hirakud	0.11	0.04
7 addl. towns in Sambalpur dist.	1.91	0.71
2 towns in Puri dist.	3.20	1.23
3 towns in Bolangir dist.	1.09	0.31
3 towns in Sundergarh dist.	1.30	0.43
3 towns in Keonjhar dist.	0.59	0.20
3 towns in Kalahandi dist.	0.74	0.24
Total	13.35	4.45

Source : Urban Basic Services – Background Material

- 3) Women's Education
- 4) Relevant Training Programmes
- 5) Supplementing women's incomes
- 6) Provision of other inputs like water supply, sanitation, etc.

11.15 In the 25 towns where UBS is in operation in Orissa, there is visible impact on the quality of life of the community, particularly women. The widowed women were given financial assistance to start small businesses which would help them to become economically self reliant. In many slums, basic facilities of tubewells and sanitary latrines were provided. Rickshaws were provided as means of sustenance to many families. Balwadi centres for pre-primary children have enabled them to get exposed to education at a young age. The regular health check-ups by the Municipal doctors and immunization to babies and pregnant women have reduced the risk of infectious diseases. There is a need to assess the performance of UBS in Orissa to improve its functioning and effectiveness in alleviating

the sufferings of urban poor.

UBS-Two success stories

Mrs. Moni Naik of Keonjhar is the luckless wife of a drunkard Batu Naik. The couple had five mouths to feed and no resources to make both ends meet. She approached the Neighbourhood Committee (NHC), Baniapat to advance her some money. Even though the NHC was reluctant, the Community Organizer volunteered to stand as guarantee and advanced a loan of Rs. 100/-. Moni Naik started a petty business of buying and selling rice, earning Rs. 10/- per day. After four months of brisk business she managed to repay the loan. Today her children attend the balwadi and have been immunized. She underwent tubectomy to prevent further pregnancies and has managed to keep the home fires burning.

Mrs. Sabitri Behera is the resident community volunteer of Bhuinya Sahi NHC in Keonjhar town. She took a loan of Rs. 200/- from the revolving fund and prepared puffed

rice, peas and other local products. Her husband sold these items in the market and earned Rs.10/- to Rs. 15/- per day. After repaying the loan in 4 months, she availed a second loan of Rs. 200/-. Her business is now running smoothly. She has lately installed a Barpalli latrine in her house and a smokeless chullah for safe cooking.

Housing

11.16 Shelter is a major problem for a majority of poor households. In overwhelming numbers they live in one room or small huts. The huts may even be temporary shelters of palm or other leaves, bamboo matting or of wattle wall or stone walls and thatched roofs. In such room huts the whole family lives, cooks, sleeps, stores and may even keep a few fowls or goats. There is no ventilation except through opening above the walls or interstices in the walls. The inside is usually smoky and dark and may leak during torrential rains. Housing is an integral part of planned activities. It is estimated by the National Buildings Organization (NBO) that by 1985 there were 7.41 lakh people in rural areas and 1.01 lakh people in urban areas, totalling 8.42 lakh people in the state who were homeless. However these figures do not include houses which are mere excuses for dwelling units and which pass for human habitation. It is estimated that the total shortfall of dwelling units by 1991 would be 1.21 million and by the turn of the century it would be around 1.41 million.

11.17 There is no proper information base to comment on the efficacy of different housing improvement programmes. The conditions of housing in the urban slums needs improvement. The census, 1981 in Orissa reveals that 80% of the families in rural areas live in Kutcha houses (Bamboo/mud walls, roof of grass/leaves or thatch). Only 8% of the households live in houses of which both the walls and roof are made of pucca materials. The size of a house also varies. Thirty per cent of the families in rural Orissa live in single room hutments, while another 41% have two rooms. With an average family size of six, at least 70% of the families in Orissa live in cramped conditions.

11.18 In a survey done by NISWASS, it was found that only 13% of the houses had separate kitchens, while barely 3% had chimneys. Thus cooking is done indoors and there is no outlet for the smoke, especially in homes without windows (Table 11.2). None of the houses had a private latrine. Under the circumstances, the Health status of family members particularly women and children gets affected leading to illness.

11.19 The state government is implementing several housing schemes - Low Income Group housing scheme, Middle Income Group housing scheme, Village housing scheme, Rental housing scheme, Land Acquisition and Development and Integrated housing scheme under the Minimum Needs Programme. Demonstration housing project is also under implementation with financial

TABLE 11.2

Housing Condition of Households

(% of hh)

Houses	Puri	Sundergarh	Mayurbhanj	Kalahandi	Total
Windows	87	82	62	46	69
Separate kitchen	14	6	20	8	13
Chimney	3	3	3	3	3
Drains	46	11	16	7	20
Waste pit.	37	38	46	29	37
Private Latrine	-	-	-	-	-

Source : NISWASS Survey.

assistance from the National Buildings Organization. The Seventh Plan outlay for the housing programme was Rs. 1280 lakhs with a target for construction of 2674 houses under different social schemes. The scheme for providing assistance to landless labourers for construction of houses is implemented under minimum needs programme. Land is provided to homesteadless persons free of cost and they are expected to contribute their own labour to supplement the assistance provided by the government. During the Seventh Plan a provision of Rs. 500 lakhs has been made for construction of 33,333 houses. Housing programmes also include grant of assistance to different agencies for infrastructure development in housing colonies, grant of loans to State Housing Board, and Special Planning Authorities for taking up social housing

schemes and ancillary development programmes. The state government is also executing a Bidi workers housing scheme as a measure of providing assistance to the economically weaker sections. Houses are being constructed under the schemes in two blocks of Cuttack district, i.e. Dasrathpur and Athgarh. The physical and financial targets of these schemes for the state are presented in Table 11.3. While these efforts are laudable, the same is yet to make a headway in improving the quality of life in both urban and rural areas of state.

Drinking water

11.20 The problem of providing safe drinking water in Orissa is acute. It is estimated that only 12% of the population in rural Orissa have access to safe drinking water as compared to 37% in urban areas. In

TABLE 11.3
Social Housing Schemes in Orissa – Seventh Plan Period

Schemes	Physical target	Plan outlay Rs. in lakhs
1. LIGH Scheme	462	67
2. MIGH	400	110
3. Rental housing scheme	166	105
4. Land acquisition + Development scheme	—	11
5. Village housing project	1280	116
6. Bidi workers housing schemes	366	19
	2674	
7. Construction Ass.	14999	500
8. Grants for infrastructure development	—	294.80
9. Grants to OSHB for repayment of HUDW loan	—	375.00
10. Housing statistical cell	—	5.70
11. Loans to housing board for social housing schemes	—	176.00
Total		1280.00

Source : Housing and Urban Development Department.

addition, Orissa has a saline tract covering approximately 5000 sq. kms. The state has identified 27,077 problem villages for which the Sixth Five Year Plan envisaged to provide at least one source of safe drinking water. The target was almost fully achieved except for about 1259 villages in inaccessible pockets. In the Seventh Plan it was proposed to give priority to the identified problem villages of the Sixth Plan in the first instance as also to provide water supply to another 15,144 problem villages. Of these 15,144 villages, 449 villages would be covered by the water supply programme taken up with DANIDA bilateral assistance and the remaining ones under the normal programmes.

11.21 The status of rural water supply as on the April, 1989 for the 13 districts of the state is presented in Table 11.4. According to this, there were still 2,358 problem villages

without any source of water supply. As a proportion of total number of villages, they constitute 5.1% with the highest proportion in Koraput district. Only in Balasore and Bolangir districts all problem villages were covered by drinking water supply schemes.

11.22 In consonance with the International Decade of Water Supply & Sanitation, 100% of the urban population in 96 communities in Orissa were to be provided with water supply to benefit 27.35 lakh population. But by the end of the Sixth Plan, only 3.38 lakh population could be provided with a safe source of water. The Seventh Plan envisages completion of spill over and ongoing water supply schemes and rehabilitation and augmentation of urban water supply systems. Thus by the end of the Seventh Plan, 17.35 lakh population would be covered by water supply facilities in 81 towns. The major components of the rural water supply scheme

TABLE 11.4

Status of Rural Water Supply in Orissa

(as on 1.4.89)

Districts	Villages fully covered	Partly covered	No source
Balasore	2933	622	—
Bolangir	1604	604	—
Cuttack	3690	979	9
Dhenkanal	1927	567	25
Ganjam	2779	587	707
Kalahandi	1829	394	91
Keonjhar	1559	333	31
Koraput	3495	707	1010
Mayurbhanj	2367	824	35
Phulbani	3529	74	310
Puri	2834	976	60
Sambalpur	2591	531	54
Sundergarh	1342	947	26
Total	32478	8145	2358

Source : Housing & Urban Development Department.

are dugwells, tubewells, piped water supply (both ground and surface water) and water harvesting structure (as recommended by the Technology Mission). In the problem villages, it is proposed to provide one tubewell/handpump for every 250 population. As per this norm the state would require 40627 tubewells. The existing resources cannot match this requirement. Hence there is need for outside assistance or mobilisation of resources from other sectors if the targets of the plan are to be achieved.

11.23 The installation of handpumps alone does not ensure its utilization. The factors affecting its utilization are inter-related and linked to the location, distance from potential users and the population. In a country wide survey of functioning of handpumps conducted by ORG in 1984-85, the above three factors were considered crucial for effective functioning of the water supply system. As water collectors are usually women, it is imperative to consider their concerns while locating a handpump. Crowded places like hats and temples must be accorded lower priority while installing handpumps. The utilization of the handpump increases when it is installed within a hamlet rather than anywhere in a village. This enables user households to utilize the water more frequently. The third factor to be considered while planning for handpump is the catchment population using water for drinking and cooking. This figure approximates to 120-150 per pump. Thus the existing criterion of one handpump for every 250 population must be given a fresh look in the above context.

11.24 In the process of providing potable water to rural and urban communities it is essential to have baseline information on the existing water consumption patterns as well as patterns of collection, storage and choice of water sources. These factors will have to be borne in mind before planning to locate the units and assigning the target population. In Orissa, there is no state-wide information on these aspects. But micro-studies conducted by ORG (1983) in the saline belt of Orissa for DANIDA drinking water project reveal interesting insights to the problems.

The findings in a nutshell are :

Among various sources available in a village, tank is the most common source followed by tubewell and open well. Use of river and canal are not frequent. The water collectors are almost always women. It is only during peak periods that men also help women. School going children of the house are also engaged in collecting water. The choice of a particular spot for collection of water is guided by several factors:-

- i) nearness to the households
- ii) suitability of water for use
- iii) caste specific locations
- iv) availability of water

11.25 Thus the pattern of water use varies from area to area as also between seasons and socio-economic levels of households. The awareness of safe drinking water and its relation to diseases must form a part of the health education if the investment in water supply programme is to achieve the desired impact. This is more so in respect of maintenance of handpumps. Steps must be taken to reduce the drudgery of women who are the chief collectors of water.

Sanitation

11.26 Sanitation is a necessary complement to water. In fact, water and sanitation needs of a community must be addressed together.

11.27 In rural areas and small towns of the state in the absence of drainage facilities, disposal of waste water is a problem. This leads to water accumulation in and around the house inviting flies, mosquitoes and other vectors.

11.28 In orissa, the access to sanitation is conspicuous by its absence particularly in rural areas according to the National Master Plan for Water Supply and Sanitation. In 1981, the proportion of population served by sanitation in Orissa was a meagre 1.1% with 10.7% of urban population only covered. The rural people were left untouched by any such facility. The performance of the state was at the lowest when compared to Tamil Nadu

(40.9%), Gujarat (13.4%) and Punjab (10.2%).

11.29 However, since 1983, the perception towards sanitation has changed considerably. The UNICEF is providing sanitary latrines to individual households in 5 blocks of 5 districts of the state as a post-flood rehabilitation measure. Earlier, the state government was promoting low-cost latrines with a single pit among eligible households. But there was lack of back-up support to sustain the programme. The UNICEF collaboration in 1983 was a well-designed strategy aimed at involving local community in installation of household latrines, the school latrines and in Anganwadi centres. The cost of the latrine was to be borne by the state government and UNICEF. The households were only to contribute physical labour in digging pits and raising superstructures.

11.30 In an evaluation of the rural sanitation programme carried out by ORG in 1986 in the five blocks where UNICEF was involved, the physical status of the latrine was found to be good. Majority of the latrines were complete in all respects i.e., digging of pits, lining of pits, placing pit covers, fitting pan and pantraps, and connecting waterseal with the pit through the drain. But the quality of construction left much to be desired. The pit covers were made of bamboo and cement concrete. In many cases the water seal was choked with dried leaves/twigs due to the non-use of latrine. The study also found only 55% of them being used while in 36% of cases these were either never used or used initially but discontinued later on.

11.31 The latrines were primarily used during the monsoon and during night time. Hence convenience of use rather than hygiene prompted the beneficiaries to opt for the latrines. The children did not use the latrines and continued to defecate in the open surroundings of the house.

11.32 These observations were also confirmed by the UNDP sponsored study on the promotion of role of women in water and environmental sanitation, also conducted by ORG in 1987. The study which focussed on women's participation in sanitation high-

lighted a few essential features of the programme :-

- Sanitation is not a priority for women when basic survival is at stake.
- Sanitation cannot be successful if water supply is inadequate for it only adds to the drudgery of women to collect water for flushing.
- If sanitation is to be promoted, then provide the facility to those who will use it, rather than to those eligible for it. Thus for example, if the AWW worker or the ANM in a village is given a latrine, she will definitely use and thus encourage others in the neighbourhood to use it too. They are the best agents of change in a village particularly for reaching women.
- There are certain misconceptions about a sanitary latrine (like the water level in a waterseal which would invite germs) which ought to be removed by use of communication skills. Regular meetings and audio-visual aids will gradually enlighten the villagers of the benefits of closed defecation.

Ecology

11.33 Orissa perhaps was one of the few states in India with rich forest resources. But due to unscrupulous and indiscriminate felling of trees, the present coverage is reported to have dwindled to 25 per cent of its surface area as against the advocated 33 per cent coverage from the ecological view point. Presently, the forest coverage in the state is reported to be depleting at an annual rate of 2.5 per cent which is much higher than the reported national rate of one per cent. Degradation of forests in strategic areas like the coastal belt and the catchments of river valley projects in Orissa has lead to frequent floods in these areas.

11.34 The extent and nature of deforestation has severe consequences on the ecology, the economy and the population. Increasing areas of the state including some parts of coastal districts of Puri and Ganjam which boast of bountiful rainfall are getting less and uneven rainfall. Government of

India has indentified 39 blocks in the state as drought prone areas; 14 blocks in Phulbani, 11 blocks in Kalahandi, 8 blocks in Bolangir and 6 blocks in Sambalpur.

11.35 The occurrence of drought and floods generally considered as consequential to forest denudation is increasing :

<u>Year</u>	<u>Drought/flood</u>
1965-66	Severe drought
1966-67	Drought
1967-68	Floods and cyclone
1968-69	Mild flood
1969-70	Mild flood
1970-71	Mild flood
1971-72	Severe cyclone and flood
1972-73	Drought and flood
1974-75	Severe drought and flood
1976-77	Severe drought
1979-80	Severe drought
1982-83	Floods
1984-85	Floods

11.36 Thus, over a period of 20 years, there have been 13 years with either drought or

floods and further the frequency of occurrence of drought tends to be increasing year after year.

11.37 The increasing frequency of drought occurrence is a major cause for concern in many parts of the state. Analyzing rainfall over a period of 13 years (ending 1974), it was observed that in drought prone areas of the state a normal year occurs once in every two years. While a drought occurrence cycle is once in three years in case of Kalahandi, it is almost every alternate year in case of Phulbani, 6 of 13 years have been drought years in Koraput district.

11.38 Owing to ecological imbalances, the drought prone districts experience environmental and ecological imbalances which they attribute to the increasing depletion of forest coverage :

- Summers are hotter, winters are cooler
- Rainfall has decreased in quantity and become more erratic
- Variety in plant life has decreased
- Variety in animal life has declined
- Scarcity of firewood
- Non-availability of essential fruits and animals for food.

CHAPTER XII

Perspectives for Development

Summing up the situation

12.1 Orissa is one of the most backward states in the Country and has nearly 40% of its population within the age group of 0-14 years. The state which accounts for 4.7% of the Country's population and 3.8% of its area comes off poorly in any meaningful comparison with most of the states in the Union. The axe of economic backwardness mostly falls on the children and other vulnerable sections of population like women, SC, ST etc., thereby affecting their growth and development.

12.2 The vagaries of Nature continue to sway the state's economy characterised by its overdependence on agriculture. Three out of every four workers are dependent on agriculture for their livelihood. In spite of continuous increase in investments, notwithstanding the existing poor infrastructural facilities, there is appallingly wide gap between the per capita income of the state and that of the country.

12.3 Orissa has a large proportion of population living below the poverty line. Based on per capita income at current prices, Orissa which ranked 13th among the 16 major states in 1973-74 (with a per capita income of Rs. 699 as against an all India average of Rs. 870) slid down to the 15th place during 1977-78 (with Rs. 845 against an all India average of Rs. 1194) and in 1983-84 (at Rs. 1636 against an all India average of Rs. 2186). A similar trend is observed with

regard to the per capita consumption. There is a glaring disparity between the levels of consumption obtained in Orissa and for developed states like Punjab and Haryana.

12.4 Undernourishment among the population, particularly among the women and children is extensive. The impact of poverty is felt by these disadvantaged groups in large measure than the others on account of lack of ownership of resources, skill and education.

12.5 Added to this is the pattern of public sector outlay which is heavily oriented towards few but important sectors like agriculture, irrigation and power. In a poor state like Orissa, such pattern of investment in economic sectors is considered justified to meet the increasing demand of primary sector production. As a result, the social services sector comprising Education, Health, Water Supply, Housing and Social Welfare get low priority in allocation of resources.

12.6 The low levels of living of the poor reflect upon their health status. The maternal malnutrition and morbidity affect the lives of children even before they are borne into the world. The repeated pregnancies and at too short intervals drain the women of all strength. Lack of adequate pre-natal and post-natal care due to inaccess, shyness, ignorance, prejudices or indifference to health accentuate the problem resulting in low birth weight babies (less than 2500 gms).

12.7 The malnutrition amongst children is

widespread. Anthropometric measurements of children aged 1-5 years using Gomez classification revealed 36% as moderately malnourished and 12% as severely malnourished. In tribal areas protein-energy malnutrition is the most glaring problem among children.

12.8 The infant feeding practices have an important influence on the child's growth and development. Babies in Orissa are generally breastfed till about one year with marginal variations among areas and communities. Practice of weaning foods is almost non-existent in the communities. The baby is given rice water which adults generally take to breakfast, once breast milk is considered insufficient. On account of a poor diet, the calorie-protein intake is much lower than that prescribed by ICMR.

12.9 The unfavourable factors affecting life before and after birth have adverse impact on the growth of children. The major diseases during childhood are diarrhoea and respiratory infections. The infant mortality rate in Orissa is very high at 130 per 1000 live births. Among eight states for which data was pooled on nutritional deficiency symptoms for pre-schoolers and 5-12 year olds. Orissa ranks first in the prevalence rate of all diseases. While deaths in early infancy could be attributed to maternal factors, deaths in late infancy are due to environmental factors, viz., living conditions, sources of water supply, level of education of the mother, standard of living etc.

12.10 The physical development alone does not ensure all round development of the child. There are some children who suffer from lack of parental love and care. The number of disadvantaged children—destitutes, orphans and delinquents is on the rise in Orissa. Childhood disabilities or handicap is an area of concern.

12.11 Measures to rehabilitate the different types of disadvantaged children touch only a fringe of the problem. In fact, the programmes received an impetus following the enactment of the Juvenile Justice Act, 1987. Similarly, for the benefit of destitute children the Orissa Orphanage Act, 1985, was promulgated. But the funds available to run

these orphanages are highly inadequate. For the disabled children, the education, training and rehabilitation services are costly and services are mostly confined to urban areas. The facilities for disabled children are almost non-existent in the rural areas. However, the establishment of District Rehabilitation Centre in the State is a step in the right direction despite its limited coverage. Another positive feature is the introduction of integrated education for disabled children in a few locations.

12.12 In the sphere of education, the age specific enrolment ratio for age group 6-11 was 69 according to V Educational Survey and the worst affected are girls and SC and ST children especially in rural and tribal areas of the state. Out of every 100 enrolled in Class-I in the rural areas, only 48 boys and 40 girls reach Class-V showing a high dropout rate at various stages. The rate of enrolment and retention is even lower at the secondary and high school levels. Thus universalisation of primary education is an arduous task.

12.13 The discrepancies observed with regard to the attainment of literacy by different groups of population is traceable to several constraints in the process of learning. These are (a) physical fitness, (b) socio-economic conditions, (c) domestic situation, (d) attitudinal factors, (e) environmental factors, and (f) administrative and service delivery systems. The dire poverty of the parents compel the children to work for a wage, thereby causing children to move away from schools resulting in low levels of learning and poor preparation for adult life. First generation learners — the children, particularly in rural areas and in economically backward sections of population have no model or guide to aspire for and in the absence of congenial reading atmosphere at home, either dropout of school, or never enroll themselves.

Concern for development

12.14 Thus the situation of women and children in Orissa is far from satisfactory. However, an encouraging trend in an otherwise gloomy situation is the growing

concern for the future of the children at all levels — local, state, national and international. Public policies in support of children are taking shape across the different social service sectors. This stems from a major experience of the planning process in India that economic development is concomitant with social development and must move together in support of human development. The National Policy on children, the Perspective Plan for Women and the New Education Policy are significant steps towards the improvement of the situation of children in India. The overall objective of the government in all these policies and programmes is to improve the quality of life and to cater to the special needs of vulnerable sectors like children, women and the handicapped through organised and sustained development activities. However, the goals set out by the national government to ensure safe and healthy childhood are possible to attain by the end of the century if the state governments translate them into successful programmes. This requires strong sense of commitment and will to work towards better childhood.

12.15 The existing programmes of government are inadequate in terms of coverage to meet the needs of the state's 10 million children. The kinds of programmes being offered are however technically appropriate. They include campaigns (immunization, ORT, etc.) amenities (schools, water supplies), personal services (supplementary feeding and primary health care) and development schemes. Past experience shows that programmes have a direct impact if they are offered as a package of services. This ensures better off-take by the potential user individuals/households.

12.16 However, it is not easy to implement them in a consolidated fashion as it requires the co-operation of a host of government functionaries whose priorities of work might be different. Besides, it is feasible to provide a package of services in only selected areas rather than ensure cent per cent coverage of the state. Further the desired returns on these projects may not accrue immediately and hence the state government may not

come forward to invest in such programmes on a large scale. Hence, the welfare of children must be analysed within the limited resource constraint.

12.17 The sphere of activities relating to child's growth and development broadly emanate from five sections : Health, Nutrition, Education, Social Welfare and Women's Development. Moreover, the Constitutional Directives of the State Policy in relation to children are being reflected in the policies of these sectors. It might be pointed out that the above sectors are not water-tight compartments with an independent set of solutions and remedies for each. The successful implementation of sectoral programmes depends on the effect of inter-linkages behind them.

Health

12.18 The National Health Policy has laid down key targets to be achieved by 1990 and 2000 AD. The state has to formulate appropriate strategies to accomplish the national goals. These goals, when compared with the current levels of achievement, indicate the volume of effort required.

12.19 India is a signatory of the Alma Ata Declaration (1978) whereby it is committed to achieve 'Health for all by 2000 A D'. The programmes executed over the last three decades have strengthened the health care system both in the country and in the state and yielded considerable dividends. The Minimum Needs Programme has helped to reduce the regional imbalances in the health delivery system in rural areas of Orissa. Further, the Area Development Project (U.K. Aid) helped create adequate health infrastructure in five districts while extending the benefits of training to doctors from non-project districts too. In spite of all these efforts, availability of health services and changes in the attitude of the people are far from satisfactory. Hence public policy must be geared to improve the functioning of the PHCs which serve as the focal health centres in rural areas.

12.20 The Minimum Needs Programmes must continue to be the sheet anchor for the

promotion of primary health care measures with greater emphasis on improvement in quality of services rendered and on their outreach. These must be backed by additional infrastructural facilities and establishment of additional units, where necessary. By the end of the Sixth Plan period (1985), the state had 314 PHCs and 20 additional PHCs, thus totalling 334. The Seventh Plan proposed to create 100 more PHCs by end of 1990. Thus there would be 434 PHCs by the beginning of the Eighth Plan. Taking into consideration the projected population of Orissa in 1990 and the norm of one PHC for every 50,000 population, the total number of PHCs that would be required are 618. Thus the state would need 184 more PHCs by the beginning of the 8th Plan to cater to the whole population on a normative basis. There would be a need for additional PHCs during the plan period with the growth of population. Further special attention must be paid to the tribal/hilly regions which are most inaccessible.

12.21 The mere setting up of PHCs does not solve the problem. The services of PHCs do not often cater to all the members of target population : the infrastructure provided is inadequate and of poor quality. Hence, there must be higher investments on the existing PHCs rather than distributing the resources too thinly to add more PHCs. The upgraded PHCs have certainly shown better results than the non-upgraded ones in the state. It is, therefore, necessary to reorient the health care strategy in favour of strengthening the existing PHCs by (i) provision of more beds, (ii) adequate stocking of essential drugs, (iii) filling up key posts of health functionaries, (iv) improving the cold chain and (v) training the PHC staff in efficient health delivery.

12.22 Primary health centres must also emphasise more on preventive health measures than curative measures. Currently, the PHCs serve as referral units for communicable diseases. But in the long run they must work towards attainment of a healthier environment through extensive mother and child care, wider coverage of immunization, and reorientation of medical education. Again

given the high cost of allopathic drugs, it would be useful to promote medicines of the Indian system (homoeopathy and ayurvedic) which are less costly and have wider acceptance in the rural areas. The medication is found to be particularly effective in the treatment of minor ailments affecting children and even some acute ailments. It would be desirable to open a wide network of these systems of medicines, particularly in the rural areas.

12.23 Similarly in the urban areas, the network of hospitals and dispensaries must continue to serve as the chief referral units for patients. The bed-population ratio of one bed for every 1000 population must be ensured in order to avoid overcrowding or excess utilisation of beds. While ensuring this, care must be taken to see that a certain number of beds are reserved for women and children who are the most vulnerable group in the population.

12.24 Apart from enhancing the facilities needed for more efficient delivery of services, the health policy must emphasise on promoting the small family norm.

12.25 The effective couple protection rate in Orissa (34%) is to be raised to 53%. Family planning is more centered towards the terminal methods rather than the spacing method. Hence a major dent has to be made on the contraceptive acceptance by promoting the benefits of delayed child births and at less frequent intervals. Only then can the norm of two children per family become a possibility. Delaying the age at marriage not by law but through social consciousness is also crucial for limiting family size. The co-operation of all religious organisations, political parties and the community at large must be enlisted in this endeavour.

12.26 The effective couple protection rates are dependant on better child survival rates. For one major factor contributing to repeated child births is the unsafe childhood due to unhygienic living conditions and malnutrition leading to death. A majority of child deaths could be averted by immunizing the child against six communicable diseases — polio, diphtheria, tetanus, T.B., measles and whooping cough. The goals of universal im-

munization are to protect 100% of all children with the primary doses by 1990. The proportion of children receiving the complete doses is 14% only. Evaluation studies carried out by ORG and others have conclusively pointed out that knowledge and awareness of immunization has definitely improved since the inception of Universal Programme of Immunization (UPI); but the coverage is yet to pick up. This calls for intensifying efforts for mass immunization with regular supply of vaccines and of the required potency.

12.27 In order to achieve this, there must be a heavier dependence on para-medical staff available in the villages who could be adequately trained to administer the vaccines. This will reduce the burden of the PHCs doctors who could utilize their efforts at diagnosis of more serious ailments. This would necessitate large scale training of village functionaries like the ANM, the MPW, the LHV and the village health guides. Further the traditional birth attendants (T.B.A.) who conduct a majority of deliveries in the home could also be trained in handling the cases more hygienically. Since it is not possible to register all the expectant mothers at the clinics and conduct deliveries in the PHC, the training of dais would help ease the situation. The risks of maternal mortality due to child birth could be effectively reduced, indirectly leading to safe childhood and finally lowering the child mortality rates. In the process, the women learn some skills which could help in their economic sustenance.

12.28 Greater efforts must also be made to create hygienic living conditions in homes, especially in rural/tribal areas. The voluntary agencies and international agencies (like UNICEF) could support a massive programme for educating the people on personal hygiene and environmental sanitation. Film strips interspersed with cartoons bearing messages on health could be shown to the villagers at frequent intervals. Health education must also form a part of the school curriculum. The village health functionaries could also be utilized in arranging group meetings to impart knowledge of

healthy homes and surroundings. These measures would help in a big way to ensure safe and healthy growth of children.

Nutrition

12.29 A sector of great relevance to the child is nutrition. 'The children and women in need' by 1987-88 are worked out below. Taking the projected population of Orissa in 1990 as 311 lakhs and adopting the poverty ratio, the population below poverty line in 1990 works out at 133.15 lakhs. The demand for special nutrition programme by 1990 was estimated as follows :

1. Projected population in 1990	311.11 lakhs
2. Population below poverty line assuming a ratio of 42.8%	133.15 lakhs
3. Child population (up to six) in the households below poverty line (@ 17%)	22.64 lakhs
4. Child population (up to 1 year) (1/6th of total children)	3.77 lakhs
5. Child population (1 to 6 years)	18.87 lakhs
6. Nursing mothers @ 16.25% of child population (1 to 6 yrs.)	3.07 lakhs
7. Expectant mothers @ 4.5% of below poverty line	5.99 lakhs
TOTAL (5 + 6 + 7) =	27.93 lakhs

Thus by 1990 about 28 lakh persons below poverty line will need supplementary feeding with locally available food. The available information states that 21 lakh population have already been benefitted by the programme. It leaves a backlog of 7 lakh persons (women and children) yet to be covered under special nutrition programmes. This indicates the magnitude of the problems at the beginning of the Eighth Plan Period.

12.30 Recognition of the widespread prevalence of malnutrition, its causes and correlates has led to identification of causative factors. First, there are factors that influence food production and its availability.

The quantity of food available for consumption in the state and its spatial and temporal distribution determine the severity and extent of malnutrition. The factors affecting food distribution at the household level constitute the second group relating largely to the purchasing power, market forces including prices. The community policies and services such as food subsidy, free mid-day meals etc., also influence food supply. Third, there are factors that influence intra-household distribution of food and among them, mothers knowledge is of considerable importance. The fourth group of factors operate at the individual level which determine the behaviour of individuals regarding the intake and absorption of food. Infection and parasitic infestations, particularly among children, are the major indicators of these factors.

12.31 A clear opportunity exists to increase the effectiveness of ICDS through a planned effort to upgrade service quality and delivery. Measurable reductions in malnutrition with corresponding improvement in neonatal mortality should be achievable through improved maternal nutritional status to raise birth weights and check growth faltering in weaning stages. While expanding the service delivery system of ICDS, special emphasis must be placed on the under-three's for growth monitoring, timely immunization, routine deworming, control of ARI and improved weaning foods. The main services to be strengthened for pregnant and nursing women are :

- Identification, health monitoring and regular nutrition supplementation
- Immunization
- Use of Folic and Iron tablets
- Use of safe disposal delivery kits

12.32 Supplementary feeding cannot be done away with although exclusive reliance on it is also fruitless. Therefore, mapping exercises could be carried out on the incidence of malnutrition and ensure location of the supplementary feeding programme particularly in the priority areas (like drought-prone, tribal etc.). Malnutrition is further aggravated by infections caused by poor

weaning foods. Hence there must be focus on the locally prepared food supplements which are easily adaptable to family diets while ensuring balanced meal. The micro-nutrient deficiencies (Vit. A, B, D etc.) must be well-explained to the villagers (especially mothers) so that appropriate food supplements could be introduced at the right time.

Education

12.33 The major goal for education is universalization of elementary education of children 6-14 years by 1990. The present enrolment in primary schools is 83% of total child population in the relevant age group according to the 5th Educational Survey. Thus nearly one out of every five children are yet to enrol.

12.34 The estimated child population in the 6-11 age group is estimated to be 39.5 lakhs by 1990. If the over-aged and under-aged children who are likely to enrol in the primary classes is considered, then the total child population to be covered by the beginning of the Eighth Plan works out to 43.4 lakhs (assuming 10% of children to be over-aged or under-aged). Enrolment of 100% population entails enhancing the strength of teachers in primary schools and other improvements.

12.35 A matter of serious concern is the considerable wastage and dropouts at early stages. In order to improve the retention in schools, the constraints in way of regular attendance must be removed. This would imply restructuring the institutional support and also reorganizing the curriculum in schools which is heavily urban biased. It is suggested that the activities in the schools must not be book-centered but should aim at the all round development of the child. The process of learning through experience, feelings and use of improved audio-visual aid must be emphasised rather than the traditional text book teaching.

12.36 Considering the national importance attached to non-formal education, the services of voluntary agencies must be sought to sustain the programme for all times to come. The agencies which have performed

fairly well in this line could serve as nodal centres for replicating the pattern in underserved areas. This calls for a regular system of training for interested persons to teach young children through non-formal methods. There must be frequent interaction between the trainers of different areas/regions so as to widen the horizons of experience. Provision of incentives (particularly free food and supply of text books) must be stepped up in order to make a dent on universal retention. It would be useful to consider paying some compensation to the poor families for sending their children to schools. As a majority of children are found to be helping the family on and off the farm, the opportunity cost of sending them to school could be linked to the rate of compensation payable to these families.

Social welfare

12.37 Apart from receiving education and good nutrition, children also need the familial support particularly parental affection to develop into useful citizens of tomorrow. In the absence of a well knit family, the child strays away and resorts to drug/begging/or petty crimes or turn destitute. These children are often victims of circumstances and are estimated to be on the rise in our country. In Orissa, the destitute children numbered around 6 lakhs in the 0-14 age groups as on 1981. A small fraction is covered under the existing institutional and non-institutional services. It would be imperative to cover the balance as far as possible in a phased manner. The support of voluntary agencies needs to be enlisted in this respect.

12.38 Given the close connection between childhood disability and poverty, for the rehabilitation of the physically handicapped children, the aids and appliances must be provided at subsidized rates. The public policies must be geared towards provision of appropriate education and training to these persons.

Women's development

12.39 The State of World Population Report (1989) maintains 'slower population growth

in developing countries and economic progress without irreversible damage to the environment will depend on investment in women, including health care, family planning services, education, and better-paid employment outside the home'. To achieve the reduction in fertility, the number of women using family planning need to be stepped up. The UN Report argues that when children cease to be the major source of women's status, possibilities of smaller families brighten up. The most effective way to do this is to provide women with the means of social and economic self-determination : full rights in the family and society, access to income and career development, education and health care, and a real say in the decisions that affect their lives including family size. The role of women in the economy and their status in society thus become crucial for children and for development. Women therefore, need to be recognised not merely as wives and mothers, but as vital and valuable members of the society.

12.40 The empowerment of women must ensure that women receive equal access – sometimes even preferential access – to health, education, training, credit and other extension services. Increasing number of hospital wards and beds need to be reserved for women. Clinics time need to be adjusted according to the convenience of women who generally have high incidence of illness and large scale under reporting of the same. Special attention needs to be focussed on rapidly raising the educational status of females particularly adolescent girls. The adolescent girl must be able to avail of learning opportunities, especially for the development of self-image. Her burden of child care must be reduced by providing supportive facilities and services. The establishment of Pre-school centres is a case in the point. In addition to formal education, girls must also receive vocational training to help economic sustenance and skill development.

12.41 In fact, the ICDS programme can also address the possible linkage between the programme and the adolescent girls to prepare them for better motherhood.

Broader linkages between village women and the ICDS programme also can be explored by mobilizing the community and increasing community participation. Some of the ways of doing so would be :

- forming mother's group
- participate in cooking and feeding on a rotational basis
- promoting nutrition education by community selection of lady facilitators or contact mothers in the village
- contributing to the AWW maintenance cost.

12.42 In order to make women more self-

reliant, there is a need to encourage self-employment activities among them. Self-employed women could be organized into productive associations to protect themselves from exploitation. In this context, the progress made under DWCRA needs to be seriously reviewed particularly in view of the fact that the initial enthusiasm shown in the initial years has of late been declining. Fewer women groups have been formed during 1988-89. This requires hard thinking among the implementing agencies to formulate a new strategy to make this programme a success. Voluntary organizations and Mahila Mandals have a major role to play in this activity.

ANNEXURES

TABLE 1

District Scenario of Orissa - Administrative Divisions

District	Number of Sub-Divisions	Number of Tahasils	Number of Community Development Blocks	Number of Tribal Blocks	Number of Grama-Panchayats	Number of Census Villages 1991 (P)
(1)	(20)	(21)	(22)	(23)	(24)	(25)
1. Balasore	3	11	19	1	401	4,303
2. Bolangir	5	9	20	-	299	2,755
3. Cuttack	6	26	41	-	825	6,572
4. Dhenkanal	7	9	16	-	322	3,135
5. Ganjam	4	14	29	5	507	4,741
6. Kalahandi	3	7	18	2	277	2,862
7. Keonjhar	3	7	13	10	225	2,104
8. Koraput	6	17	42	42	542	6,424
9. Mayurbhanj	4	7	26	26	308	3,952
10. Phulbani	3	6	15	12	200	3,670
11. Puri	4	12	29	-	449	4,976
12. Sambalpur	7	15	29	3	412	3,741
13. Sundergarh	3	7	17	17	161	1,737
Orissa	58	147	314	118	4,928	50,972

Source : State's Economy in figures, 1991, Directorate of Economics and Statistics, Bhubaneswar

TABLE 2

District Scenario of Orissa - Population by Sex and Residence (1991)

Sl. No.	Districts	Total Population	Male	Female	Rural	Urban
1	2	3	4	5	6	7
1.	Balasore	2796321	1420708	1375613	2531825	264496
2.	Bolangir	1703755	860254	843501	1539455	164300
3.	Cuttack	5503307	2801612	2701695	4825692	677615
4.	Dhenkanal	1900675	974143	926532	1712661	188014
5.	Ganjam	3143120	1562128	1580992	2672718	470402
6.	Kalahandi	1591984	795939	796045	1488097	103887
7.	Keonjhar	1315627	668026	647601	1148894	166733
8.	Koraput	2999903	1505956	1493947	2662115	337788
9.	Mayurbhanj	1871796	944378	927418	1755950	115846
10.	Phulbani	858553	429809	428744	807466	51087
11.	Puri	3570192	1840590	1729602	2864617	705575
12.	Sambalpur	2688395	1367024	1321371	2226427	461968
13.	Sundergarh	1568442	809337	759105	1043698	524744
	Orissa	31512070	15979904	15532166	27279615	4232455

Source : Census of India, (Provisional), 1991

TABLE 3
District Scenario - Area and Demographic Characteristics

TABLE 3

District Scenario - Area and Demographic Characteristics

Sl. No.	Name of the District	Total Geographical Area in sq. kms. with %age to total area of the state	Density of population (per sq. km.)	Sex Ratio Females per 1000 males	Decennial population growth rate 1981-91 (%)	Percent-age of Urban population	
1	2	3	4	5	6	7	8
1.	Balasore	6311	(4.05)	443	968	+24.13	9.46
2.	Bolangir	8913	(5.72)	191	981	+16.77	9.64
3.	Cuttack	11142	(7.16)	494	964	+18.89	12.31
4.	Dhenkanal	10827	(6.95)	176	951	+20.08	9.89
5.	Ganjam	12531	(8.05)	251	1012	+17.72	14.97
6.	Kalahandi	11772	(7.56)	135	1000	+18.88	6.53
7.	Keonjhar	8303	(5.33)	158	969	+18.03	12.67
8.	Koraput	26961	(17.32)	111	992	+20.77	11.26
9.	Mayurbhanj	10418	(6.69)	180	982	+18.33	6.19
10.	Phulbani	11119	(7.14)	77	998	+19.70	5.95
11.	Puri	10182	(6.54)	351	940	+22.22	19.76
12.	Sambalpur	17516	(11.25)	153	967	+17.86	17.18
13.	Sundergarh	9712	(6.24)	161	938	+17.23	33.46
Orissa				202	972	19.50	

Source : State's Economy in figures, 1991,
Directorate of Economics and Statistics, Bhubaneswar, 1992

TABLE 4

District Scenario - Occupational Distribution and SC and ST Literacy

Sl. No.		Percentage distribution of workers by (1991)				Literacy percentage (1981)			
		Culti-vators	Agri. labour	House-hold Industry	Other works	SC		ST	
						Total	Female	Total	Female
		1	2	3	4	1	2	3	4
1.	Balasore	51.50	24.23	1.91	22.36	26.83	11.99	11.21	2.90
2.	Bolangir	48.70	31.91	4.48	14.91	17.84	5.50	15.30	3.50
3.	Cuttack	41.30	23.16	3.26	32.55	25.38	13.14	10.78	2.93
4.	Dhenkanal	40.55	30.67	4.41	24.37	21.37	6.74	14.65	4.02
5.	Ganjam	40.93	33.43	3.13	22.51	17.18	4.97	10.83	3.67
6.	Kalahandi	46.33	38.52	0.03	12.12	15.58	4.07	11.54	2.14
7.	Keonjhar	47.77	25.06	2.70	24.47	28.73	13.25	15.26	4.86
8.	Koraput	50.64	32.92	1.65	14.79	15.65	6.82	6.31	1.65
9.	Mayurbhanj	48.40	31.91	5.53	14.16	24.76	11.10	14.50	4.52
10.	Phulbani	49.15	34.13	3.36	13.36	21.60	6.87	18.59	4.74
11.	Puri	38.14	22.53	3.35	35.88	26.57	11.97	19.33	5.81
12.	Sambalpur	40.50	31.61	6.02	21.87	22.70	8.72	19.89	7.16
13.	Sundergarh	38.88	18.21	2.53	40.38	25.66	12.25	22.70	12.52
Orissa		44.21	28.85	3.47	23.47				

Source : Census of India, 1981 and Census of India, 1991
Provisional Population Totals - Paper 3 of 1991

TABLE 5

District Scenario - SC and ST Population and Work Participation

Sl. No.	Percentage of SC population to		Percentage of ST population to		%age of SC & ST population to total population of the district	%age of total workers to total population 1991	%age of main workers to total population 1991	%age of Female main workers to total population 1991
	Total population of the district	Total SC population of the state	Total population of the district	Total ST population of the state				
1	9	10	11	12	13	14	15	16
1.	17.94	10.46	6.84	2.60	24.78	28.31	26.79	3.97
2.	15.64	5.90	19.22	4.74	34.86	41.59	35.19	12.72
3.	17.67	21.16	3.13	2.44	20.80	27.60	26.48	3.81
4.	15.83	6.48	12.26	3.26	28.09	35.54	31.33	9.75
5.	15.02	10.38	9.48	4.27	24.50	41.30	35.84	20.32
6.	15.76	5.46	31.28	7.08	47.04	45.55	37.61	15.62
7.	11.16	3.22	44.82	8.44	55.98	39.13	33.08	13.96
8.	14.06	9.04	55.22	23.18	69.28	48.35	39.69	21.89
9.	6.58	2.69	57.67	15.42	64.25	45.69	37.05	21.43
10.	18.55	3.44	38.94	4.72	57.49	48.95	38.69	21.56
11.	12.93	9.77	3.45	1.70	16.38	30.24	28.83	5.08
12.	15.35	9.05	27.20	10.49	42.55	43.52	36.84	17.07
13.	8.52	2.95	51.26	11.59	59.78	39.44	32.42	11.68

Source : Census of India, 1981 and Census of India, 1991

TABLE 6
District Scenario - Agriculture

Sl. No.	District	Agriculture			
		Percentage of Forest Area (1989-90)	Percentage of Cultivated Area (1989-90)	Percentage of Net Irrigated Area to Net Area sown (1989-90)	Cropping Intensity (1989-90)
1	2	9	10	11	12
1.	Balasore	4.0	72.18	33.4	150
2.	Bolangir	16.3	53.57	28.1	140
3.	Cuttack	15.8	63.82	47.4	178
4.	Dhenkanal	45.0	42.49	21.6	145
5.	Ganjam	49.4	39.51	59.0	180
6.	Kalahandi	43.6	49.48	15.6	149
7.	Keonjhar	30.0	37.55	22.7	131
8.	Koraput	32.8	29.27	16.1	142
9.	Mayurbhanj	46.8	42.98	21.5	131
10.	Phulbani	51.2	23.73	26.8	145
11.	Puri	31.4	46.27	57.4	167
12.	Sambalpur	35.4	38.94	32.0	138
13.	Sundergarh	40.8	34.32	19.1	130
	Orissa	35.2	41.62	31.3	149

Source : Economic Survey 1991-92, Orissa
Directorate of Economics & Statistics, Bhubaneswar.

TABLE 7
District Scenario - Health

Sl. No	District	Population served by Hospitals, Dispensaries, P.H.Cs. & Additional P.H.C. & C.H.C. etc. during 1990-91 (in '000)	Area covered by Hospitals Dispensaries P.H.Cs. & Addl.P.H.Cs. & C.H.C. during 1990-91 (in Sq. Km.)	Number of Medical beds per lakh of population 1989-90	No. of High Schools per lakh of population 1990-91
1	2	24	25	26	27
1.	Balasore	23.1	52.2	23	19
2.	Bolangir	24.0	125.5	37	12
3.	Cuttack	24.6	49.7	51	18
4.	Dhenkanal	24.4	138.8	34	16
5.	Ganjam	23.5	94.5	64	10
6.	Kalahandi	19.2	141.8	48	9
7.	Keonjhar	17.1	107.8	49	19
8.	Koraput	16.6	149.0	45	5
9.	Mayurbhanj	17.3	96.5	38	16
10.	Phulbani	13.0	168.5	68	9
11.	Puri	22.0	62.9	50	15
12.	Sambalpur	21.5	140.1	70	13
13.	Sundergarh	21.2	131.2	84	13
	Orissa	21.0	103.5	50	14

Source : Economic Survey 1991-92, Bhubaneswar, Directorate of Economics and Statistics 1992.

TABLE 8

Districtwise ICDS Projects in Orissa, 1991

Sl. No.	District	Total Projects	Rural Projects	Urban Projects	Tribal Projects
1.	Balasore	4	3	—	1
2.	Bolangir	8	7	—	1
3.	Cuttack	14	12	1	1
4.	Dhenkanal	4	3	—	1
5.	Ganjam	11	6	1	4
6.	Kalahandi	10	4	—	6
7.	Keonjhar	7	—	—	7
8.	Koraput	25	1	—	24
9.	Mayurbhanj	15	—	—	15
10.	Phulbani	13	2	—	11
11.	Puri	5	3	1	1
12.	Sambalpur	8	4	—	4
13.	Sundergarh	10	10	1	9
Rural =		45	Total = 85		
Urban =		4	Grand Total = 134		

Source : UNICEF, Bhubaneswar, 1992.

TABLE 9

Infant Mortality Rate, Orissa 1976-1990

Year	Rural	Urban	Total
1976	130	81	127
1977	151	85	147
1978	121	80	133
1979	154	86	149
1980	150	62	143
1981	140	68	135
1982	139	64	132
1983	131	73	126
1984	135	84	131
1985	135	77	130
1986	130	72	126
1987	130	74	126
1988	127	70	122
1989	126	76	122
1990	127	68	123

Source : Sample Registration Scheme: Registrar General of India

TABLE 10

Districtwise Percentage of Rural Population Served by Primary Schools / Sections within Different Distance Ranges

Sl. No.	Name of the district	Percentage of population served				
		Within the habitation	Within 1.0 km	Within 1.5 km	Within 2.0 km	Beyond 2.0 km
1		2	3	4	5	6
1.	Balasore	67.46	25.39	3.44	2.66	1.05
2.	Bolangir	66.26	24.26	1.41	4.34	3.73
3.	Cuttack	79.28	17.8	1.24	1.10	0.58
4.	Dhenkanal	80.14	15.32	0.72	2.52	1.30
5.	Ganjam	90.35	5.3	0.63	1.23	2.49
6.	Kalahandi	81.48	7.88	1.48	3.08	6.08
7.	Keonjhar	80.20	12.00	1.64	3.33	2.83
8.	Koraput	72.66	9.89	2.12	5.03	10.30
9.	Mayurbhanj	70.02	21.42	1.97	4.35	2.24
10.	Phulbani	69.00	20.7	1.60	4.50	4.20
11.	Puri	64.90	27.6	4.14	2.08	1.28
12.	Sambalpur	84.40	8.90	1.20	2.90	2.60
13.	Sundergarh	61.10	28.16	3.98	4.20	2.56
Total state		77.08	15.75	1.87	2.60	2.70

Source : Fifth All India Educational Survey, Directorate of Elementary Education, Orissa.

TABLE 11

Percentage Distribution of Deaths by Age Groups – 1988, Orissa and All India

State/ Country	Below 1 yr.	Age Groups in years							Total
		1 – 4	5 – 14	15 – 24	25 – 34	35 – 44	45 – 54	55 +	
Orissa	21.7	6.2	5.8	3.9	4.6	4.3	5.0	48.5	100.0
India	15.0	7.5	4.6	4.8	5.1	5.5	7.0	50.5	100.0

Source : Survey of Causes of Death (Rural) Series 3, No. 21, Annual Report 1988, Published in March 1990, Office of the Registrar General, India

TABLE 12

Sectorwise Plan Outlay / Expenditure of Orissa

Sl. No.	Name of the sector	6th Five –Year Plan (1980–85)		7th Five–Year Plan (1985–90)	
		Expenditure (Rs. in Crores)	Percentage to total	Expenditure (Rs. in Crores)	Percentage to total
1	2	3	4	5	6
1.	Agriculture & Allied Services	106.8	6.8	283.5	8.5
2.	Co-operation	29.8	1.9	68.0	2.0
3.	Rural Development	136.0	8.7	260.5	7.8
4.	Irrigation and Flood Control	453.9	28.9	807.4	24.2
5.	Power and renewable energy	400.5	25.5	713.3	21.3
6.	Industry and minerals	103.9	6.6	245.9	7.4
7.	Transport and Communica- tion	112.1	7.1	236.7	7.1
8.	Social and community services	214.3	13.6	603.1	18.0
9.	Science, Technology and environment	0.5	–	6.7	0.2
10.	Other economic services	6.7	0.4	35.9	1.1
11.	General services	7.3	0.5	79.0	2.4
Total		1571.8	100.0	3340.0	100.0

Source : Statistical outline of Orissa, 1991, Bhubaneswar,
Directorate of Economics & Statistics, Orissa

TABLE - 13

Position of Orissa in All India

Items	Unit	ORISSA		INDIA	
		Reference Year	Magnitude	Reference Year	Magnitude
(1)	(2)	(3)	(4)	(5)	(6)
I. AREA AND POPULATION					
(i) Geographical area	'000 Sq. Kms	1991 (P)	156	1991 (P)	32.87
(ii) Total population	Crores	Ditto	3.15	Ditto	84.43
(iii) Density per Sq. Km.	No	Ditto	202	Ditto	257
(iv) Males	Crores	Ditto	1.60	Ditto	43.78
(v) Females	Do.	Ditto	1.55	Ditto	40.65
(vi) Sex Ratio (Females per 1,000 males)	No	Ditto	972	Ditto	928
(vii) Rural population	Crores	Ditto	2.73	Ditto	62.71
(viii) Urban population	Do.	Ditto	0.42	Ditto	21.72
(ix) Urbanisation	Per cent	Ditto	13.43	Ditto	25.72
(x) Population variation	Do.	1981-91 (P)	19.50	1981-91 (P)	23.23
XI. STATE INCOME AND NATIONAL INCOME					
1. Net National Product and Net State Domestic Product					
(i) At current Prices	Rs. in crores	1989-90 (Quick)	9,416	1989-90 (Quick)	3,46,994
(ii) At 1980-81 Prices	Ditto	Ditto	4,781	Ditto	1,74,798
2. Per capita N.N.D.P. & N.S.D.P.					
(i) At current Prices	Rs.	Ditto	3,066	Ditto	4,252
(ii) At 1980-81 Prices	Rs.	Ditto	1,557	Ditto	2,142
VIII. HEALTH, EDUCATION & HOUSING					
1. Doctors registered with State Medical Council	No.	1987	9,866	1987	3,31,630
2. Doctors per lakh persons	No.	1987	34	1987	43
3. Hospitals & Dispensaries per 1000 Sq. Kms. of area	No.	Jan., 1989	3.3	Jan., 1989	12.0
4. Hospital & Dispensary Beds per lakh persons	No.	Jan., 1989	43	Jan., 1989	77
5. Hospital & Dispensary Beds	No.	Ditto	12,938	Ditto	6,22,668

Items	Unit	ORISSA		INDIA	
		Reference Year	Magnitude	Reference Year	Magnitude
(1)	(2)	(3)	(4)	(5)	(6)
6. No source problem villages	No.	As on 30-6-1991	1,086	As on 30-6-1991	5,182
7. Above as percentage of total inhabited villages	Per cent	Ditto	2.3	Ditto	0.9
8. Infant Mortality rate per 1000 live births	No.	1987-89	123	1987-89	93
9. Birth rates per 1000 persons	No.	Ditto	30.9	Ditto	31.3
10. Death rates per 1000 persons	No.	Ditto	12.6	Ditto	10.7
11. Expectation of life at birth	Years	1981-85	53.0	1981-85	55.4
12. Literacy rates @					
(i) Persons	Per cent	1991 (P)	48.55	1991 (P)	52.11*
(ii) Males	Per cent	1991 (P)	62.37	1991 (P)	63.86*
(iii) Females	Per cent	1991 (P)	34.40	1991 (P)	39.42*
13. Students Enrolment Ratio					
(a) Class-I to V (6-11 years)					
(i) Boys	Per cent	1987-88	112.4	1987-88	113.1
(ii) Girls	Per cent	Ditto	83.6	Ditto	81.8
(iii) Total	Per cent	Ditto	98.1	Ditto	97.9
(b) Class-VI to VIII (11-14 years)					
(i) Boys	Per cent	1987-88	51.4	1987-88	68.9
(ii) Girls	Per cent	Ditto	28.4	Ditto	40.6
(iii) Total	Per cent	Ditto	39.9	Ditto	55.1
14. Dropout rates (Class-1 to V)					
(i) General	Per cent	1986-87	51.3	1986-87	48.6
(ii) S.C.	Per cent	Ditto	55.5	Ditto	50.8
(iii) S.T.	Per cent	Ditto	75.5	Ditto	66.1
15. Estimates of Housing Shortage					
(a) Rural	'000 No.	1985	741	1985	18,800
	Ditto	1990	878	1990	22,300
(b) Urban	Ditto	1985	101	1985	5,900
	Ditto	1990	118	1990	6,900
(c) Total	Ditto	1985	842	1985	24,700
	Ditto	1990	996	1990	29,200

Source : States's Economy in Figure, 1991, Bhubaneswar,
Directorate of Economics and Statistics, 1992

TABLE 14

Percentage of Total Workers in 1981 and 1991 in All Areas

India/State or Union Territory	Persons			Males			Females		
	Percentage of workers		Percent- age increase in the number of workers 1981-91	Percentage of workers		Percent- age increase in the number of workers 1981-91	Percentage of workers		Percent- age increase in the number of workers 1981-91
	1981	1991		1981	1991		1981	1991	
1	2	3	4	5	6	7	8	9	10
INDIA*	36.70	37.68	26.80	52.62	51.56	21.40	19.67	22.73	42.26
States									
1. Andhra Pradesh	45.76	45.27	22.57	57.68	55.44	19.25	33.54	34.81	28.42
2. Arunachal Pradesh	52.63	47.46	22.49	58.63	54.21	25.69	45.67	39.61	17.74
3. Bihar	32.35	32.56	24.29	50.18	47.95	20.08	13.50	15.69	40.85
4. Goa	35.35	35.22	15.56	48.48	49.51	18.81	21.88	20.48	8.17
5. Gujarat	37.27	41.17	33.44	52.91	54.35	24.49	20.66	27.08	57.78
6. Haryana	31.63	30.83	23.09	49.93	47.92	20.92	10.60	11.29	34.83
7. Himachal Pradesh	42.38	42.27	19.09	52.61	49.72	11.53	31.86	34.79	31.94
8. Karnataka	40.24	41.83	25.43	54.59	53.91	19.22	25.33	29.27	39.35
9. Kerala	30.53	32.05	19.74	44.89	47.81	20.98	16.81	16.90	16.50
10. Madhya Pradesh	42.92	42.70	26.08	54.48	52.17	21.93	30.64	32.53	33.92
11. Maharashtra	42.56	42.84	26.27	53.73	52.03	21.55	30.63	33.02	35.11
12. Manipur	43.20	41.51	23.52	46.80	45.36	25.20	39.48	37.50	21.47
13. Meghalaya	45.92	43.06	23.58	53.96	49.09	20.32	37.49	36.69	28.51
14. Mizoram	45.44	49.36	50.97	52.54	54.37	43.49	37.72	43.94	62.30
15. Nagaland	48.23	44.20	43.76	52.58	48.61	42.99	43.20	39.25	44.85
16. Orissa	38.01	37.53	18.01	55.86	53.74	15.51	19.81	20.85	25.18
17. Punjab	31.50	31.44	20.05	53.76	53.34	18.74	6.16	6.78	33.08
18. Rajasthan	36.61	38.54	34.83	50.90	49.07	23.84	21.06	27.01	63.72
19. Sikkim	48.30	53.20	41.18	57.22	53.60	17.29	37.61	52.74	84.71

India/State or Union Territory	Persons			Males			Females		
	Percentage of workers		Percent- age increase in the number of workers 1981-91	Percentage of workers		Percent- age increase in the number of workers 1981-91	Percentage of workers		Percent- age increase in the number of workers 1981-91
	1981	1991		1981	1991		1981	1991	
1	2	3	4	5	6	7	8	9	10
20. Tamil Nadu	41.73	44.13	21.57	56.58	57.01	16.10	26.52	30.88	33.51
21. Tripura	32.27	31.36	29.93	50.71	47.48	25.21	12.78	14.31	49.76
22. Uttar Pradesh	30.72	32.27	31.74	50.76	49.37	22.20	8.07	12.87	99.64
23. West Bengal	30.17	32.37	33.68	50.30	51.36	26.78	8.07	11.67	80.84
Union Territories									
1. Andaman & Nicobar Islands	36.88	34.88	39.86	56.71	52.95	33.45	10.78	12.86	84.19
2. Chandigarh	34.92	34.78	41.32	54.77	54.01	38.06	9.10	10.52	66.77
3. Dadra & Nagar Haveli	48.92	53.38	45.66	56.32	57.66	38.20	41.33	48.88	56.08
4. Daman & Diu	33.22	37.09	43.38	44.49	50.72	53.16	22.62	23.06	25.26
5. Delhi	32.19	31.64	48.08	52.67	51.53	45.63	6.84	7.67	71.43
6. Lakshadweep	24.39	26.19	37.90	39.24	43.86	45.80	9.16	7.48	3.19
7. Pondicherry	30.41	33.16	45.57	47.08	50.47	43.50	13.48	15.48	52.92

* Excludes Assam and Jammu & Kashmir

Source : Census of India, 1991, *Provisional Population Totals*, Paper 3g, 1991

TABLE 15

Percentage of Distribution of Main Workers as Cultivators, Agricultural Labourers, Household Industry Workers and other Workers in Districts by Residence and Sex 1981-1991

Sl. No.	India/State or Union Territory/District	Total Rural Urban	Persons Males Females	Percentage of main workers							
				Cultivators		Agricultural Labourers		Household Industry Workers		Other Workers	
				1981	1991	1981	1991	1981	1991	1981	1991
1	2	3	4	5	6	7	8	9	10	11	12
INDIA	Total	Persons	41.58	38.75	24.94	26.15	3.47	3.63	30.01	31.47	
			Males	43.70	40.01	19.56	20.90	3.18	3.33	33.56	35.76
			Females	33.20	34.55	46.18	43.56	4.59	4.63	16.03	17.26
		Rural	51.10	48.47	29.88	31.77	3.08	3.08	15.94	16.68	
			Males	55.16	51.79	24.00	26.11	2.87	2.84	17.97	19.26
			Females	37.07	38.98	50.20	47.94	3.79	3.76	8.94	9.32
		Urban	5.13	4.99	6.05	6.66	4.94	5.57	83.88	82.78	
			Males	5.20	4.90	4.66	5.35	4.21	4.82	85.93	84.93
			Females	4.66	5.54	16.57	14.89	10.48	10.30	68.29	69.27
ORISSA	Total	Persons	46.94	44.21	27.76	28.85	3.30	3.47	22.00	23.47	
			Males	51.27	48.35	22.65	22.96	2.84	3.02	23.24	25.67
			Females	24.50	26.03	54.24	54.73	5.69	5.42	15.57	13.82
		Rural	51.78	49.30	30.14	31.64	3.26	3.47	14.82	15.59	
			Males	56.91	54.52	24.70	25.37	2.79	3.01	15.60	17.10
			Females	26.26	27.77	57.21	57.50	5.60	5.37	10.93	9.36
		Urban	7.08	6.44	8.20	8.19	3.64	3.41	81.08	81.96	
			Males	7.49	6.75	6.70	6.70	3.23	3.07	82.58	83.48
			Females	4.02	4.03	19.45	19.72	6.72	6.01	69.81	70.24
1. Sambalpur	Total	Persons	42.62	40.50	30.46	31.61	5.68	6.02	21.24	21.87	
			Males	47.58	45.45	25.03	24.96	4.43	4.72	22.96	24.87
			Females	21.90	23.68	53.13	54.18	10.90	10.45	14.07	11.69
		Rural	48.14	45.88	33.73	35.07	5.79	6.35	12.34	12.70	
			Males	54.34	52.58	27.93	28.09	4.59	5.02	13.14	14.31
			Females	23.63	25.17	56.66	56.66	10.53	10.47	9.18	7.70
		Urban	6.27	6.07	8.91	9.52	4.95	3.97	79.87	80.44	
			Males	6.48	6.25	7.41	7.69	3.46	3.08	82.65	82.98
			Females	4.91	4.73	18.49	22.63	14.52	10.34	62.08	62.30
2. Sundergarh	Total	Persons	37.65	38.88	18.11	18.21	2.47	2.53	41.77	40.38	
			Males	40.18	41.11	14.41	13.35	2.27	2.41	43.14	43.13
			Females	23.51	28.33	38.72	41.22	3.62	3.12	34.15	27.33
		Rural	51.67	53.41	24.49	24.70	2.91	2.77	20.93	19.12	
			Males	56.57	58.64	19.86	18.64	2.65	2.66	20.92	20.06
			Females	28.28	33.27	46.54	48.05	4.17	3.20	21.01	15.48
		Urban	1.88	3.31	1.83	2.32	1.36	1.95	94.93	92.42	
			Males	1.87	3.39	1.67	1.98	1.39	1.87	95.07	92.76
			Females	1.93	2.49	3.29	5.51	1.11	2.65	93.67	89.35
3. Keonjhar	Total	Persons	50.48	47.77	22.67	25.06	2.53	2.70	24.32	24.47	
		Males	55.17	52.19	18.36	19.40	2.43	2.58	24.04	25.83	
		Females	27.76	30.90	43.56	46.67	3.02	3.15	25.66	19.28	

Sl. No.	India/State or Union Territory/District	Total Rural Urban	Persons Males Females	Percentage of main workers							
				Cultivators		Agricultural Labourers		Household Industry Workers		Other Workers	
				1981	1991	1981	1991	1981	1991	1981	1991
1	2	3	4	5	6	7	8	9	10	11	12
4.	Mayurbhanj	Rural	Persons	55.70	52.86	24.53	27.28	2.42	2.65	17.35	17.21
			Males	60.99	58.41	19.83	21.20	2.28	2.53	16.90	17.86
			Females	30.49	32.92	46.95	49.14	3.07	3.05	19.49	14.89
		Urban	Persons	8.05	7.41	7.53	7.49	3.49	3.15	80.93	81.95
			Males	9.02	7.98	6.66	6.61	3.65	2.94	80.67	82.47
			Females	2.69	3.56	12.35	13.48	2.60	4.58	82.36	78.38
		Total	Persons	46.92	48.40	33.60	31.91	5.33	5.53	14.15	14.16
			Males	53.33	54.62	25.44	23.54	4.39	4.39	16.84	17.45
			Females	29.61	32.92	55.64	52.74	7.86	8.38	6.89	5.96
		Rural	Persons	48.76	50.51	34.61	32.96	5.39	5.61	11.24	10.92
			Males	55.87	57.54	26.36	24.46	4.42	4.46	13.35	13.54
			Females	30.15	33.62	56.22	53.39	7.92	8.38	5.71	4.61
		Urban	Persons	7.77	6.37	12.32	10.96	4.16	3.93	75.75	78.74
			Males	7.73	6.79	8.85	8.56	3.94	3.22	79.48	81.43
			Females	8.01	3.79	32.45	25.63	5.40	8.26	54.14	62.32
	Balasore	Total	Persons	53.50	51.50	25.63	24.23	1.72	1.91	19.15	22.36
			Males	56.28	54.53	23.08	21.63	1.50	1.62	19.14	22.22
			Females	15.74	12.99	60.30	57.23	4.69	5.64	19.27	24.14
		Rural	Persons	56.90	55.19	26.53	25.17	1.63	1.85	14.94	17.79
			Males	59.73	58.33	23.88	22.43	1.42	1.56	14.97	17.68
			Females	17.18	14.10	63.72	60.99	4.62	5.62	14.48	19.29
		Urban	Persons	16.87	16.89	15.93	15.40	2.74	2.50	64.46	65.21
			Males	18.12	18.09	14.22	13.95	2.48	2.18	65.18	65.78
			Females	4.31	4.91	33.14	29.83	5.29	5.79	57.26	59.47
	Cuttack	Total	Persons	44.72	41.03	23.71	23.16	3.14	3.26	28.43	32.55
			Males	47.57	43.64	21.34	21.06	2.74	2.93	28.35	32.37
			Females	7.68	6.75	54.50	50.69	8.34	7.63	29.48	34.93
		Rural	Persons	50.04	46.87	26.07	25.97	3.09	3.24	20.80	23.92
			Males	53.20	49.79	23.48	23.59	2.65	2.87	20.67	23.75
			Females	8.56	7.85	60.06	57.69	8.83	8.22	22.55	26.24
		Urban	Persons	3.70	3.64	5.50	5.17	3.47	3.39	87.33	87.80
			Males	3.90	3.90	4.78	4.70	3.36	3.32	87.96	88.08
			Females	1.35	0.51	14.33	10.74	4.81	4.22	79.51	84.53
7.	Dhenkanal	Total	Persons	46.01	40.55	27.07	30.67	3.36	4.41	23.56	24.37
			Males	49.18	43.84	23.58	26.15	2.89	3.71	24.35	26.30
			Females	23.90	22.13	51.43	55.95	6.64	8.30	18.03	13.62
		Rural	Persons	49.38	43.90	28.79	33.00	3.45	4.54	18.38	18.56
			Males	52.92	47.82	25.07	28.29	2.94	3.77	19.07	20.12
			Females	25.39	23.13	54.02	57.96	6.88	8.59	13.71	10.32
		Urban	Persons	8.06	7.43	7.78	7.64	2.40	3.10	81.76	81.83
			Males	8.80	7.85	7.38	6.80	2.35	3.14	81.47	82.21
			Females	0.97	2.76	11.59	17.15	2.88	2.59	84.56	77.50

Sl. No.	India/State or Union Territory/District	Total Rural Urban	Persons Males Females	Percentage of main workers							
				Cultivators		Agricultural Labourers		Household Industry Workers		Other Workers	
				1981	1991	1981	1991	1981	1991	1981	1991
1	2	3	4	5	6	7	8	9	10	11	12
8.	Phulbani	Total	Persons	52.98	49.15	29.58	34.13	3.32	3.36	14.12	13.36
			Males	58.07	55.64	23.08	25.64	3.05	3.07	15.80	15.65
			Females	36.39	32.34	50.76	56.15	4.18	4.10	8.67	7.41
		Rural	Persons	54.85	50.99	30.45	35.18	3.18	3.32	11.52	10.51
			Males	60.41	58.19	23.87	26.60	2.93	3.02	12.79	12.19
			Females	37.16	32.83	51.40	56.80	3.97	4.08	7.47	6.29
		Urban	Persons	8.96	8.69	9.24	11.01	6.55	4.18	75.25	76.12
			Males	9.49	8.08	6.55	7.76	5.54	4.07	78.42	80.09
			Females	5.77	12.12	25.54	29.23	12.65	4.77	56.04	53.88
9.	Bolangir	Total	Persons	51.00	48.70	30.84	31.91	4.25	4.48	13.91	14.91
			Males	56.92	54.91	25.74	25.53	3.53	3.86	13.81	15.70
			Females	18.29	20.21	59.01	61.19	8.21	7.30	14.49	11.30
		Rural	Persons	54.43	52.22	32.35	33.55	4.08	4.37	9.14	9.86
			Males	60.89	59.09	26.96	26.89	3.34	3.76	8.81	10.26
			Females	19.27	21.34	61.70	63.51	8.05	7.09	10.98	8.06
		Urban	Persons	9.26	7.97	12.40	12.93	6.37	5.82	71.97	73.28
			Males	10.03	8.67	11.38	10.54	5.75	5.06	72.84	75.73
			Females	4.03	3.79	19.32	27.20	10.55	10.31	66.10	58.70
10.	Kalahandi	Total	Persons	50.74	46.33	35.59	38.52	2.55	3.03	11.12	12.12
			Males	56.36	52.81	30.52	31.67	2.05	2.52	11.07	13.00
			Females	22.43	21.64	61.16	64.67	5.05	4.93	11.36	8.76
		Rural	Persons	52.83	48.45	36.51	39.69	2.56	3.06	8.10	8.80
			Males	58.78	55.45	31.30	32.66	2.04	2.55	7.88	9.34
			Females	23.17	22.32	62.51	65.97	5.13	4.96	9.19	6.75
		Urban	Persons	11.21	7.69	18.08	17.12	2.29	2.36	68.42	72.83
			Males	12.18	8.47	16.22	15.15	2.17	2.05	69.43	74.33
			Females	5.07	3.00	29.90	29.09	3.06	4.23	61.97	63.68
11.	Koraput	Total	Persons	53.99	50.64	28.47	32.92	1.81	1.65	15.73	14.79
			Males	60.23	56.91	21.10	24.20	1.79	1.73	16.88	17.16
			Females	32.16	34.08	54.23	55.95	1.90	1.43	11.71	8.54
		Rural	Persons	58.35	54.51	30.41	34.90	1.69	1.57	9.55	9.02
			Males	65.58	62.08	22.66	25.97	1.68	1.67	10.08	10.28
			Females	34.03	35.56	56.53	57.27	1.70	1.31	7.74	5.86
		Urban	Persons	11.52	9.50	9.59	11.91	3.06	2.47	75.83	76.12
			Males	12.57	10.09	7.25	8.20	2.74	2.23	77.44	79.48
			Females	5.93	6.46	22.00	31.12	4.73	3.71	67.34	58.71
12.	Ganjam	Total	Persons	42.13	40.93	32.47	33.43	3.39	3.13	22.01	22.51
			Males	47.44	45.47	23.34	23.68	3.33	3.12	25.89	27.73
			Females	27.40	29.54	57.80	57.88	3.56	3.16	11.24	9.42
		Rural	Persons	46.30	45.07	35.11	36.28	2.95	2.77	15.64	15.88
			Males	52.96	51.20	25.60	26.13	2.92	2.82	18.52	19.85
			Females	28.99	30.94	59.83	59.69	3.02	2.66	8.16	6.71

Sl. No.	India/State or Union Territory/District	Total Rural Urban	Persons Males Females	Percentage of main workers							
				Cultivators		Agricultural Labourers		Household Industry Workers		Other Workers	
				1981	1991	1981	1991	1981	1991	1981	1991
1	2	3	4	5	6	7	8	9	10	11	12
13.	Puri	Urban	Persons	10.01	8.76	12.03	11.32	6.84	5.89	71.12	74.03
			Males	10.70	8.96	8.23	8.09	6.09	4.98	74.98	77.97
			Females	6.54	7.66	31.41	29.57	10.63	11.00	51.42	51.77
		Total	Persons	44.25	38.14	23.25	22.53	3.09	3.45	29.41	35.88
			Males	47.28	40.97	20.72	20.43	2.70	3.07	29.30	35.53
			Females	7.70	7.80	53.67	45.02	7.89	7.61	30.74	39.57
		Rural	Persons	51.22	47.04	26.35	26.98	3.20	3.58	19.23	22.40
			Males	54.57	50.26	23.46	24.33	2.76	3.10	19.21	22.31
			Females	9.16	9.94	62.54	57.50	8.74	9.06	19.56	23.50
		Urban	Persons	4.73	3.85	5.70	5.36	2.48	2.98	87.09	87.81
			Males	5.09	4.12	4.88	4.93	2.33	2.93	87.70	88.02
			Females	1.13	1.64	13.68	8.94	4.03	3.42	81.16	86.00

Source : Census of India, 1991, Provisional Population Totals Paper 3 of 1991

TABLE 16

Yearwise Total & Women Employees in the Organised Sector

Year	Total Employees (in '000)	Women employees in organised sector (in '000 nos)			Percentage of women employees to total employees
		Public	Private	Total	
1	2	3	4	5	6
1986	692	39	11	50	7.2
1987	708	42	11	53	7.5
1988	730	46	12	58	7.9
1989	735	48	12	60	8.2
1990 (P)	770	54	13	67	8.7

Source : Economic Survey 1991-92, Bhubaneswar. Directorate of Economics and Statistics, 1992.

TABLE 17
Agriculture Production in Orissa (In Lakh M.Ts.)

Crops	Seventh Plan						
	1984-85	1985-86	86-87	87-88	88-89	89-90	1990-91
1	2	3	4	5	6	7	8
1. Rice	41.7	52.3	48.3	34.7	53.0	62.8	52.8
2. All Cereals	47.6	58.7	53.3	40.5	58.9	68.5	57.9
3. Total Pulses	8.5	11.0	10.5	10.1	11.1	11.2	11.7
4. Total Food Grains	56.1	69.7	63.8	50.6	70.0	79.7	69.6
5. Total Oil Seeds	6.8	7.7	7.6	8.2	8.6	8.7	9.0

Source : Directorate of Economics and Statistics, Bhubaneswar.

TABLE 18
Monthly Per capita Consumer Expenditure on Selected Items and their Percentage Distribution of Orissa during 1988-89 (44th round)

Sl. No.	Item	Average MPCE (in Rs.)		Percentage Distribution	
		Rural	Urban	Rural	Urban
1	2	3	4	5	6
1.	Total Cereals	58.00	59.27	39.36	23.12
2.	Pulses and Products	4.52	9.55	3.07	3.73
3.	Milk and Milk Products	3.71	14.29	2.52	5.57
4.	Edible Oil	4.89	10.62	3.32	4.14
5.	Meat, Egg, Fish	6.65	13.41	4.51	5.23
6.	Vegetables	10.84	16.53	7.36	6.45
A.	Food : Total	101.59	153.99	68.95	60.07
1.	Fuel & Light	11.73	17.90	7.96	6.98
2.	Clothing	10.06	21.53	6.83	8.40
B.	Non-Food : Total	45.75	102.37	31.05	39.93
Total Expenditure		147.34	256.36	100.00	100.00

Source : N.S.S. Report No. 370 (44th Round).

TABLE 19

Average Total Monthly Per capita Consumer Expenditure in Orissa and India in Different N.S.S. Rounds

(In Rs.)

N. S. S. Round	Period	Orissa		India	
		Rural	Urban	Rural	Urban
1	2	3	4	5	6
32nd	1977-78	52.47 (100)	86.99 (100)	68.89 (100)	96.15 (100)
38th	1983	98.75 (188)	151.41 (174)	112.44 (163)	164.03 (171)
42nd	1986-87	114.19 (218)	216.94 (249)	140.93 (205)	222.65 (232)
44th	1988-89	147.34 (281)	256.36 (295)	175.10 (254)	266.85 (278)

Source : N.S.S. Report Nos. 311, 319, 355 & 370.

Notes : Percentage of increase given in brackets

TABLE 20

Revenue Expenditure on General Education

Sl. No.	Year	Expenditure (Rs. in crore)	Per capita Expenditure (Rs)
1	2	3	4
1.	1986-87	241.5	83.54
2.	1987-88	274.5	93.23
3.	1988-89	323.5	107.87
4.	1989-90	398.1	130.35
5.	1990-91 (R.E.)	501.0	161.03
6.	1991-92 (B.E.)	524.6	166.48

Source : Economic Survey 1991-92, Bhubaneswar, Directorate of Economics and Statistics, 1992.

TABLE 21

Infant Immunization Coverage April 1991 To March 1992, Orissa

District	Target (100%)	DPT 3				OPV 3			
		Immunized		Backlog		Immunized		Backlog	
		Nos	%	Nos	%	Nos	%	Nos	%
PURI	90650	80763	89.09	9887	10.91	81185	89.56	9465	10.44
CUTTACK	140170	118869	84.80	21301	15.20	118911	84.83	21259	15.17
GANJAM	78385	72991	93.12	5394	6.88	73140	93.31	5245	6.69
PHULBANI	20950	21521	102.73	-571	-2.73	21525	102.74	-575	-2.74
SAMBALPUR	70300	61794	87.90	8506	12.10	61523	87.51	8777	12.49
BALASORE	69180	70214	101.49	-1034	-1.49	70396	101.76	-1216	-1.76
KEONJHAR	32830	33192	101.10	-362	-1.10	33237	101.24	-407	-1.24
KALAHANDI	38960	30906	79.33	8054	20.67	31868	81.80	7092	18.20
DHENKANAL	48415	45708	94.41	2707	5.59	45506	93.99	2909	6.01
MAYURBHANJ	44295	48557	109.62	-4262	-9.62	48903	110.40	-4608	-10.40
BOLANGIR	42570	35428	83.22	7142	16.78	35324	82.98	7246	17.02
KORAPUT	75545	72084	95.42	3461	4.58	71797	95.04	3748	4.96
SUNDERGARH	42750	41351	96.73	1399	3.27	41367	96.76	1383	3.24
ORISSA :	795000	733378	92.25	61622	7.75	734682	92.41	60318	7.59

	BCG				MEASLES			
	Immunized		Backlog		Immunized		Backlog	
	Nos	%	Nos	%	Nos	%	Nos	%
PURI	86190	95.08	4460	4.92	69083	76.21	21567	23.79
CUTTACK	139682	99.65	488	0.35	100284	71.54	39886	28.46
GANJAM	82457	105.19	-4072	-5.19	63620	81.16	14765	18.84
PHULBANI	23343	111.42	-2393	-11.42	17870	85.30	3080	14.70
SAMBALPUR	69846	99.35	454	0.65	57359	81.59	12941	18.41
BALASORE	74887	108.25	-5707	-8.25	57826	83.59	11354	16.41
KEONJHAR	39535	120.42	-6705	-20.42	32482	98.94	348	1.06
KALAHANDI	37709	96.79	1251	3.21	23747	60.95	15213	39.05
DHENKANAL	54678	112.94	-6263	-12.94	40591	83.84	7824	16.16
MAYURBHANJ	50009	112.90	-5714	-12.90	43755	98.78	540	1.22
BOLANGIR	38408	90.22	4162	9.78	34354	80.70	8216	19.30
KORAPUT	71633	94.82	3912	5.18	57003	75.46	18542	24.54
SUNDERGARH	45831	107.21	-3081	-7.21	37707	88.20	5043	11.80
ORISSA :	814208	102.42	-19208	-2.42	635681	79.96	159319	20.04

World Summit for Children – Goals for 2000

The following is the full list of goals, to be attained by the year 2000, which were adopted by the World Summit for Children on September 30 1990. After widespread consultation among governments and the agencies of the United Nations, these targets were considered to be feasible and financially affordable over the course of the decade ahead.

Overall goals 1990-2000

- A one-third reduction in under-five death rates (or a reduction to below 70 per 1,000 live births whichever is less).
- A halving of maternal mortality rates.
- A halving of severe and moderate malnutrition among the world's under-fives.
- Safe water and sanitation for all families.
- Basic education for all children and completion of primary education by at least 80%.
- A halving of the adult illiteracy rate and the achievement of equal educational opportunity for males and females.
- Protection for the many millions of children in especially difficult circumstances and the acceptance and observance, in all countries, of the recently adopted Convention on the Rights of the Child. In particular, the 1990s should see rapidly growing acceptance of the idea of special protection for children in time of war.

Protection for girls and women

- Family planning education and services to be made available to all couples to empower them to prevent unwanted pregnancies and births which are 'too many and too close' and to women who are 'too young or too old'.
- All women to have access to prenatal care, a trained attendant during childbirth and referral for high-risk pregnancies and obstetric emergencies.
- Universal recognition of the special health and nutritional needs of females during early childhood, adolescence, pregnancy and lactation.

Nutrition

- A reduction in the incidence of low birth weight (less than 2.5 kg.) to less than 10%.
- A one-third reduction in iron deficiency anaemia among women.
- Virtual elimination of vitamin A deficiency and iodine deficiency disorders.
- All families to know the importance of supporting women in the task of exclusive breast-feeding for the first four to six months of a child's life and of meeting the special feeding needs of a young child through the vulnerable years.
- Growth monitoring and promotion to be institutionalized in all countries.

- Dissemination of knowledge to enable all families to ensure household food security.

Child health

- The eradication of polio.
- The elimination of neonatal tetanus (by 1995).
- A 90% reduction in measles cases and a 95% reduction in measles deaths, compared to pre-immunization levels.
- Achievement and maintenance of at least 90% immunization coverage of one-year-old children and universal tetanus immunization for women in the child-

bearing years.

- A halving of child deaths caused by diarrhoea and a 25% reduction in the incidence of diarrhoeal diseases.
- A one-third reduction in child deaths caused by acute respiratory infections.
- The elimination of guinea worm disease.

Education

- In addition to the expansion of primary school education and its equivalents, today's essential knowledge and life skills could be put at the disposal of all families by mobilizing today's vastly increased communications capacity.

EDUCATION FOR ALL BY 2000

National Goals for the 1990s

The EFA goals as set out in the "Education for All by 2000" document which was prepared by NIEPA at the instance of the Government of India for Jomtien Conference and was presented as the country paper, are as follows :

Early Childhood Education

The expansion of early childhood development activities, including appropriate forms of pre-school or early learning has been identified as an important prerequisite for achieving the goals of primary education, no targets have been mentioned for the projected coverage.

Primary Education

Access : By the year 1995, primary education or their alternatives will be provided to every child in the rural area within a distance of one km.

Participation : Primary education will be provided through schools or alternatives to :
(a) 80 per cent of all children up to the age of 11 years by 1995, which will necessarily include at least 70 per cent belonging to every identified disadvantaged group, and
(b) 95 per cent of all children up to the age of 11 years by the year 2000, which will necessarily include at least 85 per cent girls from every identified disadvantaged group.

Achievement : Efforts will be made to ensure that minimum levels of learning will be achieved by :

- (a) 70 per cent of all children, including, at least 60 per cent of every disadvantaged group pursuing elementary education by the year 1995 and,
- (b) 80 per cent of all children including at least 70 per cent of the girls from every disadvantaged group pursuing elementary education by the year 2000.

Differential targets : The same document mentions differential targets only with respect to the overall levels of coverage (in percentages) of disadvantaged groups. The state/district/block level desegregated targets are still to become available and in some states are still to be established.

Adult Education

In the age group 15-35 years, 80 per cent of the persons of each gender of every identified disadvantaged group will be enabled to become functionally literate by the year 1995, and the remaining population by the year 2000.

A total of about 80 million people (as laid down by the National Literacy Mission) are expected to be covered by 1995 and the remaining 30 million by the year 2000.

Continuing Education

All functionally literate people and all those who have received primary or upper primary

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education through formal, non-formal channels will be provided opportunities to maintain and, if possible, upgrade their education through public education channels including Jan Shikshan Nilayams, public libraries, the use of media and other channels of distance education. Increased acquisition of the knowledge, skills and values required for improved living will be made available to individuals and families.

Draft Eighth Plan Targets (1992-1997)

For Universal Enrolment : Universal enrol-

ment of all children including girls and children belonging to Scheduled Castes/ Scheduled Tribes, using both full-time formal schools and part-time non-formal arrangements.

For Universal Retention : Reduction of drop-out rate between Class I to V from the existing 45 per cent to 20 per cent.

For Universal Achievement : Achievement of a minimum level of learning by approximately all children at the primary level and introduction of this concept at the upper primary stage on a large scale.

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ABBREVIATIONS

ADP	=	Area Development Project	ICMR	=	Indian Council of Medical Research
ANC	=	Ante-natal care	IMR	=	Infant Mortality Rate
ANM	=	Auxilliary Nurse and Mid wife	IPC	=	Indian Penal Code
AWW	=	Anganwadi Worker	IRD	=	Integrated Rural Development
BPL	=	Below the Poverty Line	ITHAS	=	Institute of Tribal Health and Social Science
BW	=	Balwadi	Kcal	=	Kilocalories
CARE	=	Co-operative for American Relief Everywhere	LHV	=	Lady Health Visitor
CD & RR	=	Community Development and Rural Reconstruction	MCH	=	Maternal and Child Health
CI	=	Chronic Impairment	M.M.	=	Millimetre
CO	=	Community Organizer	M.P.	=	Madhya Pradesh
DANIDA	=	Danish International Development Agency	MPW	=	Multi-purpose worker
DSH	=	Directorate of Health Services	NBO	=	National Buildings Organisation
DRC	=	District Rehabilitation Centre	NGO	=	Non-Governmental Organization
DWCRA	=	Development of Women and Children in Rural Areas	NHC	=	Neighbourhood Committee
ERRP	=	Economic Rehabilitation of Rural Poor	NIN	=	National Institute of Nutrition
FCC	=	Family Counselling Centre	NIPOT	=	National Institute of Prosthetic and Orthotic Training
Gm	=	Grams	NIRTAR	=	National Institute of Rehabilitation Training and Research
Govt.	=	Government	NISWASS	=	National Institute of Social Work and Social Sciences
HC	=	Handicap	NNMB	=	National Nutrition Monitoring Bureau
ICDS	=	Integrated Child Development Services			

ORG	=	Operations Research Group	UCD	=	Urban Community Development
ORS	=	Oral Rehydration Solution	UIP	=	Universal Immunisation Programme
ORT	=	Oral Rehydration Therapy	UNDP	=	United Nations Development Programme
PHC	=	Primary Health Centre	UNICEF	=	United Nations Children's Fund
SC	=	Scheduled Caste	USNP	=	Upgraded Special Nutrition Programme
Sq.km.	=	Square Kilometers	VHG	=	Village Health Guide
ST	=	Scheduled Tribes	VAB	=	Voluntary Action Bureau
TB	=	Tuberculosis			
TBA	=	Traditional Birth Attendant			
UBS	=	Urban Basic Services			



